ZOO WORLD
Proposal (Draft)
Project: Zoo World

By: Amy Lin
Date: 1-27-06
Class: Individual Vision
Instructor Name: Janell Baxter

Proposal (Draft)

Project Goal

To make a game about running the zoo using Flash
To entertain an audience of ages 13 and up who are able to use the little or a lot of the entrepreneurial skills that they have in running a zoo and able to handle the complexity of the game
The audience needs to obviously have Flash and able to use the mouse to drag/drop/click

Objectives

To achieve this goal, the project must:
1. Not be too complex where the audience find it too difficult to learn how to play
2. Include how to play and a little key on the side to help them remember what to click/press
3. Have an interface comprised of buttons, images, and text
4. (Possibly) sound
5. Allow the users to interact with the animals (feeding them, playing with them, etc)
6. Have a money goal they must meet to get to the next level while keeping the animals and people happy

Benefits

Personal: I have played a lot of games throughout my life. Many of them I can still remember and love playing if I were to play it again. It would help me particularly as an interactive multimedia designer to figure out how to make something that definitely is interactive. Also, I would like to be more comfortable with Flash and add more motion projects to my portfolio. I’m sure that as a graphic and web designer I should be comfortable using Flash.

Player: Hopefully s/he has fun with this game and possibly learn the fundamentals of running a zoo.

Interface, What the Player Will Be Able To Do, Player Goals

There will be three screens the player can look at. One of them includes a kind of game board that tells you which level you are in and how close you are to the ending. The objective of the game is to get to the end. To get to the end, however, the player needs to keep an eye on their animals, revenue, expenses, customers, and overall zoo condition. The animals may become erratic or go nuts if they aren't in the appropriate environment, getting too much food, or getting too little food. Maybe they'll try to break out of the zoo or start biting people or acting up against other animals they are with if they are caged with other animals. The same type of animals will be in the same cage but I suppose they could choose to put different animals in the same cage and see what happens. The second screen is the actual zoo where everything is happening. It is the main screen. In there the player can check customer ratings, check money coming in, or just manage the zoo. The third screen is just a help screen to possibly get hints or it'll have a tutorial of the main things s/he need to know to play the game.
To get to the next level the player must gain enough money and (a specific visitor rating??) otherwise they are stuck and have to repeat the same level while also keeping the animals and visitor happy?? The next level will give them a choice of buying new things for the zoo (like better habitats or maybe an ad in the paper to get more people to come or better food for the animals). The player will be awarded with more animals or building type things for the zoo (habitats, food for animals, booths, etc) once they finish a level. Maybe the player can choose which they want at the end of each level.

Research

I will need to:
1. Research various zoos (how they run their zoo, animals they have, things they have in the zoo, expenses, most popular animals?, etc)
2. Find animal information (habitats, food, what animals work well with each, behaviors, training, etc)
3. Find pictures of animals that zoos have
4. Decide how many and which animals to use in the zoo (maybe add more over time or if have time)
ZOO WORLD

Proposal (Final)
Proposal (Final)

Project Goal

To entertain an audience of ages 6 and up who are able to use the little or a lot of the entrepreneurial skills that they have in running a zoo and able to handle the complexity of the game.

Objectives

To achieve this goal, the project must:
1. Not be too complex where the audience find it too difficult or too confusing to learn how to play.
2. Include how to play and a little key on the side to help them remember what to click/press and visitor types.
3. Have an interface comprised of buttons, images, and text.
4. Have an interactive interface with animals and people that move around.
5. (Possibly) sound.
6. Allow the users to interact with the animals (feeding them, playing with them, etc).
7. Have a money goal they must meet to get to the next level while keeping the animals and people happy.
8. To make a game about running the zoo using Flash.
9. The audience needs to obviously have Flash and able to use the mouse to drag/drop/click.
10. Have set visitor types which will make the game less complex.

Benefits (short and long-term)

Personal: I have played a lot of games throughout my life. Many of them I can still remember and love playing if I were to play it again. It would help me particularly as an interactive multimedia designer to figure out how to make something that definitely is interactive. It would be helpful also to learn after people play the game the things I can change to make it even better. There could possibly be changes even after I present it on the final day the project is due. Also, I would like to be more comfortable with Flash and add more motion projects to my portfolio. I’m sure that as a graphic and web designer I should be comfortable using Flash.

Player: Hopefully s/he has fun with this game and possibly learn the fundamentals of running a zoo or even about some animals. Some day maybe s/he will be able to download it and save where they stopped in the game when they didn’t finish. I’m also hoping for this project to be sticky where people will keep coming back to play.

Target Audience

Ages 6 and up.
At least able to move the mouse around, click/drop with the mouse.
Don’t need to be highly technologically advanced because the game will hopefully be easy enough to learn.
quickly
Who like animals/zoos or like/have played entrepreneurial games like Lemonade Tycoon, Diner Dash, etc
Who like to play games
Who have a Flash player and a browser

**Interface, What the Player Will Be Able To Do, Player Goals**

The player is the zookeeper/zoo manager.
A few of the decisions based on what the player will be able to do and what the interface will particularly look like will need to be made during the design process so I have thrown out ideas that may or may not be used.
There will be three screens the player can look at. One of them includes a kind of game board that tells you which level you are in and how close you are to the ending. The objective of the game is to get to the end.
To get to the end, however, the player needs to keep an eye on their animals, revenue, expenses, visitors, and overall zoo condition. The animals may become erratic or go nuts if they aren’t in the appropriate environment, getting too much food, or getting too little food. Maybe they’ll try to break out of the zoo or start biting people or acting up against other animals they are with if they are caged with other animals. The same type of animals will be in the same cage but I suppose they could choose to put different animals in the same cage and see what happens. The second screen is the actual zoo where everything is happening. It is the main screen. In there the player can check visitor ratings, check money coming in, or just manage the zoo. The third screen is just a help screen to possibly get hints or it’ll have a tutorial of the main things s/he need to know to play the game.
To get to the next level the player must gain enough money and (a specific visitor rating??) otherwise they are stuck and have to repeat the same level while also keeping the animals and visitor happy?? The next level will give them a choice of buying new things for the zoo (like better habitats or maybe an ad in the paper to get more people to come or better food for the animals). The player will be awarded with more animals or building type things for the zoo (habitats, food for animals, booths, etc) once they finish a level. Maybe the player can choose which they want at the end of each level.
At the start of each level, there will be a pop-up screen that tells the player his/her goal (and what he/she will get at the end like a new habitat or something).

**Research**

I will need to:
1. Research various zoos (how they run their zoo, animals they have, things they have in the zoo, expenses, most popular animals?, etc)
   - Research types of zoo visitors and prices (how to show visitor ratings: individually have satisfaction ratings or overall satisfaction ratings; visitor groups like school groups?)
2. Find animal information (habitats, food, what animals work well with each, behaviors, training, etc)
3. Find pictures of animals that zoos have
4. Decide how many and which animals to use in the zoo (maybe add more over time or if have time)
5. Research children (how they play games, what applications they’re using, what type of interface works best)
### Project: Zoo World

**By:** Amy Lin  
**Date:** 2-22-06  
**Class:** Individual Vision  
**Instructor Name:** Janell Baxter

#### Production Timeline

<table>
<thead>
<tr>
<th>DATE DUE</th>
<th>TITLE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 23</td>
<td>Last Minute Changes Before Making Prototype Digital</td>
<td>Any minor changes to how the functional prototype will look/navigate/etc</td>
</tr>
<tr>
<td>February 26</td>
<td>Extra User Testing</td>
<td>Getting feedback from user to get more ideas for the prototype</td>
</tr>
<tr>
<td>March 1</td>
<td>Functional Prototype of Version One</td>
<td>Prototype will have</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1) interface frame designed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>--level map screen partially finished (need to continue to build this until version 1 delivered)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>--main screen (general layout of zoo) designed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2) most if not all the animals digitally designed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3) at very minimum: level 1 finished</td>
</tr>
<tr>
<td>March 3</td>
<td>Documentation of Changes/Additions to Prototype for Version One</td>
<td>Documentation that will be used for next user testing in helping to get feedback from the user</td>
</tr>
<tr>
<td>March 5 and/or 12</td>
<td>Digital Design User Testing Phase I/II, Additions to Prototype for Version One</td>
<td>Testing prototype thus far, document additions/improvements/errors/etc</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prototype for Version One</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1) more levels finished, hopefully first stage finished</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2) interface/screens as well as animals digitally finished</td>
</tr>
<tr>
<td>March 8</td>
<td>User Testing Plan</td>
<td></td>
</tr>
<tr>
<td>March 5 and/or 12</td>
<td>Digital Design User Testing Phase I/II</td>
<td>Testing prototype thus far, document additions/improvements/errors/etc</td>
</tr>
<tr>
<td>March 15</td>
<td>Usability Report</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Event Description</td>
<td>Details</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------------------------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>March 19</td>
<td>Digital Design User Testing Phase III</td>
<td>Testing prototype thus far</td>
</tr>
<tr>
<td>March 22</td>
<td>Additions to Prototype</td>
<td>Prototype will have 1) first stage finished (unlocking animals,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>customer ratings up, different customer types)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2) second stage ¼ finished (unlock habitats/booths, new ticket booth)</td>
</tr>
<tr>
<td>March 29</td>
<td>Version One &amp; Documentation</td>
<td>First stage finished (unlocking animals, customer ratings up, different</td>
</tr>
<tr>
<td></td>
<td></td>
<td>customer types)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Second stage halfway finished (very few if any animals to unlock, unlock</td>
</tr>
<tr>
<td></td>
<td></td>
<td>habitats/booths, new animal nursery, new ticket booth because more are</td>
</tr>
<tr>
<td></td>
<td></td>
<td>coming, gift shop)</td>
</tr>
<tr>
<td>April 5</td>
<td>Revised Production Timeline &amp; Summary of Changes</td>
<td></td>
</tr>
<tr>
<td>April 12</td>
<td>Critical Analysis Report</td>
<td></td>
</tr>
<tr>
<td>April 28</td>
<td>Finish Version Two</td>
<td>Finish up Version Two</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1) stages finished</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2) ready for final user testing</td>
</tr>
<tr>
<td>April 30/May</td>
<td>Digital Design User Testing Final Phase</td>
<td>Testing Version Two before final delivery</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>May 3/4</td>
<td>Finishing Touches</td>
<td>Taking feedback from Final User Testing Phase and using or not using the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>feedback to work it into Version Two</td>
</tr>
<tr>
<td>May 8/9</td>
<td>Last Minute Touches</td>
<td>Final final check to make sure everything works and is ready for final delivery</td>
</tr>
<tr>
<td>May 10</td>
<td>Version Two (Final Version), Documentation, &amp; 2 Archive CDs</td>
<td>Ready for final delivery</td>
</tr>
</tbody>
</table>
ZOO WORLD

Project Plan
Project Plan

Project Overview

• This project is an action-puzzle game that will test the player's entrepreneurial skills in running a zoo.
• There will be three versions to present to the client. One version is a functional prototype for version one and is built in Flash that can be used to test with the user. Version One includes first stage and half of second (final) stage. Version Two is the final version ready for delivery including first and second stages finished.
• It is scheduled to be ready for final presentation and delivery to FlashKid Games company by May 10, 2006. It will be a game built and run in Flash that will include graphics, text, and sound. Presentation will be online. A web browser, Internet connection, and PC or Mac will be required.
• Graphical and textual content within the game will be created in Flash by the game developer. There were images and text found over the Internet but were digitally kept as references for the project only. Obtaining any/all usage rights is the responsibility of the client. Graphical content that will be created include animals, customers (types are school groups, tourists, couples, and families), food bags, money bags, levels map, main map, main menu, and main navigation. The game will have between 5-15 unlockable animals which is part of the player’s objective. Textual content that will be created includes objectives of the game, button labels, map labels.
• Any animal sound material were obtained from Georgetown University’s website and implemented into the game.

Schedule (including deliverables and methodology)

Any changes or delays that may occur will be documented. Final deadline will always be May 10, 2006.

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<thead>
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<td>* Last Minute Changes Before Making Prototype Digital</td>
<td>Any minor changes to how the functional prototype will look/navigate/etc</td>
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<tr>
<td></td>
<td>*Overview of User Testing Plan</td>
<td>Already typed up overview, add anything else</td>
</tr>
<tr>
<td>February 26</td>
<td>* Extra User Testing</td>
<td>Getting feedback from user to get more ideas for the prototype</td>
</tr>
<tr>
<td>March 1</td>
<td>* Functional Prototype of Version One</td>
<td>Prototype may or may not look visually appealing and buttons may or may not work but just be something that can be tested by the user</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prototype will have</td>
</tr>
</tbody>
</table>
1) interface frame designed  
--level map screen partially finished (need to continue to build this until version 1 delivered)  
--main screen (general layout of zoo) designed  
--goal field as user plays the game  

2) most if not all the animals created in Flash and saved in Flash library  

3) first stage: level 1? includes  
--families that come and visit  
--5 animals  
--one ticket booth  

4) sound material implemented in Flash library  

<table>
<thead>
<tr>
<th>March 3</th>
<th>* Documentation of Changes/Additions to Prototype for Version One</th>
<th>Documentation that will be used for next user testing in helping to get feedback from the user</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 5 and/or 12</td>
<td>* Digital Design User Testing Phase I/II</td>
<td>First/Second phase of user testing after paper prototype became digital. Testing prototype thus far, document additions/improvements/errors/etc</td>
</tr>
</tbody>
</table>
| * Additions to Prototype for Version One | Prototype for Version One  
1) taking feedback from Digital User Testing Phase I/II and using or not using the feedback to work it into prototype  
2) more levels finished, hopefully first stage finished  
3) interface/screens as well as animals digitally finished |
| March 8 | * User Testing Plan | User Testing Plan will include  
1) taking User Testing Plan already implemented into this schedule  
2) adding details from Overview of User Testing Plan where applicable  
3) adding any changes to Overview  
4) compiling the above into one plan |
| March 5 and/or 12 | * Digital Design User Testing Phase I/II | First/Second phase of user testing after paper prototype became digital. Testing prototype thus far, document additions/improvements/errors/etc |
| March 15 | * Usability Report | Take feedback from User Testing Phase I/II and type up Usability Report |
| March 19 and/or 26 | * Digital Design User Testing Phase III | Testing prototype thus far, documentation |
| March 22 | * Additions to Prototype | Prototype will have  
1) first stage finished (unlocking animals, customer |
**Project Plan**

<table>
<thead>
<tr>
<th>Date</th>
<th>Phase Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 26-28</td>
<td>* Finishing Touches Running game through to check any errors or possibilities of any last changes, upload to server</td>
</tr>
<tr>
<td>March 29</td>
<td>* Version One &amp; Documentation First stage finished (unlocking animals, customer ratings up, different customer types) Second stage halfway finished (very few if any animals to unlock, unlock habitats/booths, new animal nursery, new ticket booth because more are coming, gift shop)</td>
</tr>
<tr>
<td>April 5</td>
<td>* Revised Production Timeline * Summary of Changes</td>
</tr>
<tr>
<td>April 12</td>
<td>* Critical Analysis Report</td>
</tr>
<tr>
<td>April 28 (or as long as it is before final user testing)</td>
<td>* Finish Version Two Finish up Version Two 1) stages finished 2) ready for final user testing</td>
</tr>
<tr>
<td>April 30/May 7</td>
<td>* Digital Design User Testing Final Phase Testing Version Two before final delivery, documentation</td>
</tr>
<tr>
<td>May 3/4</td>
<td>* Finishing Touches Taking feedback from Final User Testing Phase and using or not using the feedback to work it into Version Two</td>
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<tr>
<td>May 8/9</td>
<td>* Last Minute Touches Final final check to make sure everything works and is ready for final delivery</td>
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<tr>
<td>May 10</td>
<td>* Version Two (Final Version) 1) Documentation 2) Archive CDs Ready for final delivery</td>
</tr>
</tbody>
</table>
ZOO WORLD
User Testing Plan
User Testing Plan

Description

• The goals from user testing plan are generally for the purpose of finding ways to improve the game so they can focus more on what they need to do to finish the game and how they would go about it. If things like the interface interferes with that goal then something needs to be changed depending on user desires. After all, s/he is the target audience. I would need to compile a lot of feedback from them as the game progresses further in development. These specific things are listed below.

• I will be testing one of my friend's daughter who is 6 years old and plays a variety of Flash games online from Nickelodeon's website. I see her every Sunday because she goes to the same church as me so I will test her on that day. Other children between 6-12 years old. I am going to try to find 2 other children to test within that age range and have the ability to click/move the mouse around to do things on the computer which does describes my target audience.

• For the Digital Design phases I will have the user test the game on my laptop and I will provide her with a mouse. The computer she uses at home has a mouse so she is not used to the laptop touchpad. I will limit the testing sessions to a maximum of 40 minutes but that is flexible upon what the user can do and/or wants to do.

Schedule

<table>
<thead>
<tr>
<th>DATE DUE</th>
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</table>
| February 26 | * Pre-Digital Design User Testing | 1) what will animals look like? Show sketches of animals to them  
2) what animals will they want to see first and what animals are they willing to work for?  
3) is the interface too complex/difficult to understand?  
4) can they easily navigate and figure out what they need to do/how they do it? Do they know what to do without me telling them?  
5) level of difficulty rises through the end, first level too difficult?  
6) what will visitor types look like? Show user what the visitors look like |
| March 5 and/or 12 | * Digital Design User Testing Phase I | First phase of user testing (testing of functional prototype)...continuing to test the prototype as it evolves into the first version |
1) now digital, navigation/objectives/etc clear to user? interface issues? ways to make it better? anything confusing? why? are they able to figure things out without me telling them? do they know what to do when they enter a level?

2) what problems do they run into while playing the game?

3) ideas of how to make it more engaging, is it engaging enough? what makes it engaging for the user?

4) what is their first reaction in terms of appearance and what they need to do?

5) user said it seemed really complicated at first glance in pre-design testing, do they think that now?

6) even if difficult to finish the level, are they still willing to try to finish it? what can i do to change it if not?

| March 19 and/or 26 | * Digital Design User Testing Phase II | Testing Version One, documentation  
1) testing first stage (improvements/additions)  
--functionality of the game  
--interactivity (engaging, entertaining)  
--difficulty  
--too much or too few levels  
2) testing ¼ of second stage with same testing criteria as for first stage |
| March 19 and/or 26 | * Digital Design User Testing Phase II | Testing Version One, documentation  
1) testing first stage (improvements/additions)  
--functionality of the game  
--interactivity (engaging, entertaining)  
--difficulty  
--too much or too few levels  
2) testing ¼ of second stage with same testing criteria as for first stage |
| April 2 | * Digital Design User Testing Phase III | Testing Version One as it evolves to Version Two, documentation  
--taking feedback from User Testing Phase II and testing those changes from the feedback  
--testing additions/improvements/changes |
| April 9 and/or April 16 and/or April 23 | * Digital Design User Testing Phase IV | Testing Version Two, documentation |
| April 30/May 7 | * Digital Design User Testing V | Testing Version Two before final delivery, documentation |
ZOO WORLD
Usability Report
Project: Zoo World

By: Amy Lin
Date: 3-15-06
Class: Individual Vision
Instructor Name: Janell Baxter

Usability Report

Testing conditions

- I was able to test my friend’s daughter Abigail who is 6 years old and currently plays a Flash game online based on the cartoon Kim Possible. I tested her this past Sunday after church with my laptop and mouse.
- Another friend of mine was also sitting next to her helping me to get feedback from Abigail and she even tested it a little bit.
- It took about 30 minutes long for everything and she kept playing it over and over again.

Visuals/Interface feedback

- I already knew of some of the problems she pointed out before even testing her because my priority was to test her on other things. However, she did help me make sure to fix it for version one. One of the problems I had was making the bus disappear when clicked but it wouldn’t work.
- Some visuals were mistaken for something else such as the bus and the bears. Abigail kept calling the bus a car and the bears, seals. It’s not that important for her to get them correct completely anyhow. However, she did need to know more of a distinction between the visual of what animals she needed to unlock and what were not unlocked. The instructions said that but it was still unclear to her. I will need to change that.
- I did not have the visitors move into the zoo after they paid for their ticket and wander around because I still could not get that to work with the visitors in the ticket line. She asked if the visitors fly away after you click on them and I had to explain that. Abigail was so focused on making them disappear that she didn’t really care about the idea I had for the visitors to wander around. I can see why though because the visitors keep coming down by themselves without stopping. I am still toying with the idea of having them wander around. Her focus was only on the ticket line portion but later asked about the unlockable animals in how those come into play.
- Even though I had the “how to play” button, Abigail still automatically pressed the “play” button to play the game therefore she did not know what to do in the game right away until noticing there was a “how to play” part she had to read. She actually read the Mission instructions though since those were located after pressing “play.” I may add the how to play instructions in the Mission instructions screen instead or in addition to the “how to play” screen. She knows it is there now though.
- She asked if there was a pause for the game. I’ve known her for a long time and she’s really smart. She was trying to pause it so that she can easily click the visitors. The visitors keep moving down the screen so she had to click them to get money. I told her yeah there was but
- Something I did not know was that you can still see the visitors coming if you do not meet the goal of the first mission. After the time is up and you don’t meet the goal, it returns to the title screen and you can see some visitors that were on the screen already before the game ended on the title screen. That is a bug I will need to fix. She still clicked on them and was like, “Hey, I can still make them disappear!” She thought that was fun. She found fun in the bugs I had not fixed which is so typical of kids. There is something about clicking the visitors as they’re moving down the line on their own that keeps her focused and amused.
I think overall she liked the concept of clicking the visitors which made them disappear before they leave the screen. That was something she knew right away that she had to do. She kept trying to click on the bus to make it disappear.

**Ideas she gave/desired for version one**

- After the first time Abigail played the game, she said “this is too easy” yet still kept playing it over and over again which was a good thing. She wanted them to either go down the line faster or more objects to click or both. I told her that I had those ideas already but this was just a simple version to test on her so that it is more open for feedback. So that was successful because I did not implement all the ideas I had in mind in the prototype on purpose. She wanted ways to make it harder. It was for sure engaging already though, I could tell. She also talked about making the visitors fall slow then gradually faster and faster which was supposed to happen in the prototype but it was not distinct. I need to fix that.
- Abigail even gave the idea of having all of the customer types in one level but after thinking about it she thought it might be too difficult having 5 things fall down.
- Another idea I had in mind was to make bonus rounds if the player got more than the goal amount by the end of the level but did not implement that yet. After testing the prototype on her, I asked her what do you want in the game that will make it more fun for you? She said ways to collect extra points. So I asked her, so a bonus round where you would do the same thing as the first mission? She said no, maybe getting food for the animals; bonus rounds are good.
- I wanted to make the player’s total subtract whenever s/he loses a visitor a.k.a. the visitor passes the ticket booth line without being clicked on. At first, Abigail thought that would have been too difficult but after many times of playing she thought it would have been good. She loves a great challenge but she probably was just getting too used to the game. She played the same level over and over again since I only had her test that same level. I tried to add that into the game too but because I have the movie clip go to a blank keyframe once clicked on, the movie clip is still moving down the ticket line but you just can’t see it, I think, since when I tried adding the subtract function, the player’s total wouldn’t subtract per miss but per pixel it moved down since it kept moving without the player being able to see visibly on the screen.

**What will I change for the next testing session, if anything?**

- I think I will need to be more careful about telling her what to do when she doesn’t know what to do. Sometimes it’s just easier for me to tell her exactly but I tried to give her hints instead for the most part in what she needs to do to find out the answer of her question.
- It was actually really helpful to have someone there to help me get feedback from her just to explain things better. I did not even think of having someone there outside of Abigail and me when I was laying out the testing plan but that friend is a teacher of elementary school kids after all so that was also why she was really helpful. Next time, I may or may not have someone there with us in testing. It was helpful but it would have been okay without it too I think.
- I kept rewriting the points I had to make sure to get feedback from before testing her especially since I kept adding/changing things to the original prototype that I showed in class. That was a helpful guide in testing her because she, at the same time, hit a lot of the same points I wanted to get feedback from without even asking her first.
- The amount of time allowed for the session was very flexible which was a good thing. She was free to give any suggestions and not in any time crunch. Usually Sundays after church is a good time to test her since it’s the only day I get to see her and allows the most time so in my testing plan I always put the testing session on a Sunday.
ZOO WORLD

Version 1 User Testing
User Testing Results

March 26, 2006 USER TESTING

Because programming portion took a lot longer than I thought it would, the scope had to be cut down for version one. Version one now has only 2 levels but they work and are still engaging enough for the user as testing showed today. Sound has been incorporated into the game. There is a different sound appropriate to the customer type whenever the user clicks on the customer and if the user does not meet the goal of level one, the user can try again. The first level presents 6 animal types that are not unlocked yet but only three can be unlocked in this level. The first level has two customer types that come down the ticket line. The second level has one additional customer type to the original two and three more unlockable animal types (the rest of the total unlockable animals).

The speed of the game was sped up for this round of testing as requested and more animals were placed in the game for the user to unlock. A second level was also added which showed the unlockable animals left and what s/he unlocked in the first level.

I forgot to bring the mouse for the user to test with therefore that caused some problems. The user had to use my laptop’s touchpad which s/he has not used before. The user was still able to play it but after a 10 tries it became too difficult and stopped. I slowed the game down and because the user was not used to a laptop touchpad so it didn’t help much. A few people around my age were able to play it easily because they had laptops and once the user saw them playing easily they wanted to try it again.

I had not added a bonus round yet but talking to the user s/he said it was too soon to add one even after the second round. The user had enough challenge in the first two levels and thought using the faster speed would be challenging enough when a mouse is available.

The original goal set for the second level was way too hard to reach so after testing, I realized I needed to lower the goal. The user thought it was still too high but a mouse was not available yet so that may change.

The user brought the idea of using the keyboard while having difficulty with the touchpad but it confirmed my idea of making use of the keyboard during bonus rounds. I had the idea of navigating an animal to get food with the keyboard in the bonus rounds so that may be in version two.

What gave me a good indication that the game was engaging and sticky was that the user was the first one to ask me about whether I brought the game or not before I asked her about it today. That was a great plus to me knowing that s/he wanted to play it again. And even after it being difficult to adjust, the user still wanted to play the next time I test it on her.
March 28, 2006 USER TESTING

I brought the mouse and surely it was challenging enough but at least navigating was not a problem anymore.

There may still need to be some kind of change with showing what animals the user did unlock already. Right away after you beat level one you go to level two and there’s not upfront indication that you unlocked animals other than that you got to go to level two. Level two starts right away with the people coming down the ticket line for the user to hit to disappear so no time to look at the right side to see what animals were unlocked from the first level.

The user was the first to ask me again if I had brought the game or not before I even brought the topic up. S/he is curious to know what the game will be like next time.
ZOO WORLD

Production Timeline
*revised 4-5-06
## Project: Zoo World

By: Amy Lin  
Date: 4-5-06  
Class: Individual Vision  
Instructor Name: Janell Baxter

### Production Timeline

*Whatever has an asterisk (*) in front of it are the revised parts to the timeline as of 4-5-06*

<table>
<thead>
<tr>
<th>DATE DUE</th>
<th>TITLE</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 23</td>
<td>Last Minute Changes Before Making Prototype Digital</td>
<td>Any minor changes to how the functional prototype will look/navigate/etc</td>
</tr>
<tr>
<td>February 26</td>
<td>Extra User Testing</td>
<td>Getting feedback from user to get more ideas for the prototype</td>
</tr>
</tbody>
</table>
| March 1       | Functional Prototype of Version One                | Prototype will have  
|               | 1) interface frame designed                        |                                                                            |
|               | 2) most if not all the animals digitally designed   |                                                                            |
|               | 3) at very minimum: level 1 finished               |                                                                            |
| March 3       | Documentation of Changes/Additions to Prototype for Version One | Documentation that will be used for next user testing in helping to get feedback from the user |
| March 5 and/or 12 | Digital Design User Testing Phase I/II, Additions to Prototype for Version One | Testing prototype thus far, document additions/improvements/errors/etc  
|               | Prototype for Version One                         |                                                                            |
|               | 1) more levels finished, hopefully first stage finished |                                                                            |
|               | 2) interface/screens as well as animals digitally finished |                                                                            |
| March 8       | User Testing Plan                                  |                                                                            |
| March 5 and/or 12 | Digital Design User Testing Phase I/II             | Testing prototype thus far, document additions/improvements/errors/etc  
<p>|               | Testing prototype thus far                         |                                                                            |
| March 15      | Usability Report                                   |                                                                            |
| March 19      | Digital Design User Testing Phase III              | Testing prototype thus far                                                 |</p>
<table>
<thead>
<tr>
<th>Date</th>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 22</td>
<td>Additions to Prototype</td>
<td>Prototype will have 1) first stage finished (unlocking animals, customer ratings up, different customer types) 2) second stage ¼ finished (unlock habitats/booths, new ticket booth)</td>
</tr>
<tr>
<td>March 29</td>
<td>Version One &amp; Documentation</td>
<td>*two levels functional (unlocking 6 animals, three visitor types, sound)</td>
</tr>
<tr>
<td>April 5</td>
<td>Revised Production Timeline &amp; Summary of Changes</td>
<td></td>
</tr>
<tr>
<td>April 12</td>
<td>Critical Analysis Report</td>
<td></td>
</tr>
<tr>
<td>April 28</td>
<td>Finish Version Two</td>
<td>Finish up Version Two 1) *done 2) ready for final user testing</td>
</tr>
<tr>
<td>April 30/May 7</td>
<td>Digital Design User Testing Final Phase</td>
<td>Testing Version Two before final delivery</td>
</tr>
<tr>
<td>May 3/4</td>
<td>Finishing Touches</td>
<td>Taking feedback from Final User Testing Phase and using or not using the feedback to work it into Version Two</td>
</tr>
<tr>
<td>May 8/9</td>
<td>Last Minute Touches</td>
<td>Final final check to make sure everything works and is ready for final delivery</td>
</tr>
<tr>
<td>May 10</td>
<td>Version Two (Final Version), Documentation, &amp; 2 Archive CDs</td>
<td>*at least one or two more levels (bonuses, bigger playing space, more visitor types, ways to attract visitors, different way of showing locked animals) *if have time (visitor ratings; something happens when the user rollover the animals and/or they start moving or saying things as the game goes on; choice of buying which animals/habitats/anything else zoo-related; more things other than animals to unlock like ticket booth, nursery, gift shop, etc.)</td>
</tr>
</tbody>
</table>
ZOO WORLD
Summary of Changes to Production Timeline *4-5-06
Summary of Changes to Production Timeline

Because the programming portion took a lot longer than I thought it would, the scope had to be cut down for version one. Version one now has only 2 levels but they work and are still engaging enough for the user as testing showed. Sound has been incorporated into the game. This was actually only a possibility before but I was able to add it. There is a different sound appropriate to the customer type whenever the user clicks on the customer and if the user does not meet the goal of level one, the user can try again. The first level presents 6 animal types that are not unlocked yet but only three can be unlocked in this level. The first level has two customer types that come down the ticket line. The second level has one additional customer type to the original two and three more unlockable animal types (the rest of the total unlockable animals). I proposed two stages that comprised of all the levels in the game but that idea is thrown out. There will just be levels now since there will not be that many. So much more could be done per level to keep the user wanting to play more than I had thought so there are less levels. There are more visitor types to add into the game as well that have not been added yet.

The goals for version two are now to make these levels more engaging and give the user a little more challenge. At least one or two levels will be added for version two. The playing space will also be expanded so that all the activity is not just in one narrow area to the left of the screen as shown in version one. The visitors coming down the ticket line will be slightly changed like having them more spread out. Other things like cotton candy or peanuts can come down too as bonuses. Maybe if the user is over the goal while there is still time left in the game, the cotton candy and such start coming down. There’s also the idea of peanuts starting to fill up next to the elephant. More ways to attract more visitors will be added like being able to buy newspaper advertisements. Instead of having the blackened animals to show they’re locked, I will just have an empty space and the user will need to fill up the space as they get more money. There will be background music that speeds up as the time runs out instead of what I have in version one with just one sound that plays when ten seconds are left. Some other minor changes will be the clock. It will need to be assumed that kids do not read the instructions first. It needs to be more clear that the clock is showing time left. Visitor ratings have not been added to version one as proposed.

Things that will be added if there is time: visitor ratings; something happens when the user rollover the animals and/or they start moving or saying things as the game goes on; choice of buying which animals/habitats/anything else zoo-related; more things other than animals to unlock like ticket booth, nursery, gift shop, etc.

What I Learned

I have learned up to this point and even at the beginning that proposing the scope is tough. It is better to overestimate the amount of time I will take for a task to get done
particularly the programming portion. I had all these great ideas that I wanted but because of time constraints and being oblivious to truly how big of a challenge I was giving myself, I was forced to cut down the scope. What you propose does not always work out the way you expect it to but in some sense it is better because it is better to make a very polished piece than having all these unfinished ideas in the game that may not even work.

What I found more important was to get the game to just be functional than putting so many ideas into the game. Therefore, it took much testing and troubleshooting by myself before even testing it on the user. Then even testing it on the user I was able to discover minor errors. After I get the game to be functional, I needed to make it even better.

After getting it to be functional, more ideas could be added to each level. Each level even the little amount there is has the potential to be even more engaging, more fun, and overall better so that was more important than having a lot of levels. That is why the scope was cut and version two (final version) will have less levels than proposed but more things to do.
ZOO WORLD

Critical Analysis
Analysis of Toshiba Hopkin’s Music Genre Project

By: Amy Lin
Date: 4-10-06
Class: Individual Vision
Instructor Name: Janell Baxter

Critical Analysis Report

The sound and animation caught my attention right away from the start. It made me want to go further in the piece. There was a mystery of what I am supposed to do afterwards. I think there needs to be some type of direction to what the user is supposed to do. I suppose kids just click everywhere until they get some place though. The title Music Genre leads me to think it is a project about that but I feel like the choices should be right there below it or each drum should have the title of each genre above it. Should the title be plural (Genres) instead? My eyes are automatically drawn to the drums and didn’t notice the menu till after playing with the drums. Maybe the menu can stand out more either with a different color or having the whole menu appear right from the beginning instead of needing to hover over it first. I do like, however, that it is consistent and clear throughout the piece that all the action is going to be happening on the right side (like where the user’s focus should be). It is clear from the beginning because of the drums and the animation. Then, only the navigation is covering the left side. It is like a website design.

I’m curious to know if you will go further with the hitting the drums at the beginning in the final version. It is fun to be able to make different beats and sounds with it. I think there should be a way to stop the beats from playing other than just going to a different section of the project. Even another idea would be having each drum go to a different section of the project or if you stick with hitting the drums at the beginning you could have different instruments pop up and allow the user to make a song. Also, for the kids audience, you could have the different characters you drew for the different genres show up at the beginning and it will lead you to that genre. I think this suggestion is more to give an example of making the navigation more visually appealing and fun for the kids. However, I know learning the content is a bigger issue than the animations or anything like that so that is why I suggest background music.

I think there could be background non-vocal music in the separate genre sections while you read about it. Using Flash adds a different feel to the piece depending on how you go about it. Something Janell brought up to someone else was why use Flash instead of just making a website out of it. So I think that is something to think about too. With Flash you can add those little animations with the text and such. I really like the way you designed the title for the blues section. It represents that genre very well.

The color scheme is very bold and stands out which is a good thing. For kids to want to learn something it needs to stand out I think. The text on the navigation clashes a bit though.

The navigation menu was a bit confusing just because the history button was hard to click and there are two home links. Maybe you were going to change that later but just having the buttons functional first? I wasn’t sure if the history section will have history of all the different genres or just the blues or if each genre will link to one another within the history section. The option of making the navigation menu disappear when hovering over it again is nice to have. It may not be important to have though unless the content will take up the space the navigation menu is using too.

The character you drew is very cute and I like that it animates too. It makes me want to learn about it more or even see how the character ties into the project. In the history page, it seems like that character should be clickable to go to another page.
The second home button links to the guitar game. How does that relate to the whole piece or did you just add that to make sure that is functional first? As said in class, indicators of where on the fingerboard the user should press would be helpful. I don’t know if you did this intentionally but I noticed the fingerboard is not blurry and the rest of the guitar is meaning the user should click only on the fingerboard and not the rest of the guitar? It wasn’t too noticeable but looking closer made me notice that. This is the anal side in me but when I looked closely to notice that, it is a bit more obvious that the fingerboard is a whole other layer on top of it. I don’t know if anyone else would care that it’s like that. It should be fine though.

I’m wondering how you are going to organize the piece. Will it flow just from genre to genre and have games in between or chronologically or? I’m anxious to see how you will tie everything together since there are just bits and pieces right now.
ZOO WORLD
Final To-Do List
Project: Zoo World

By: Amy Lin
Date: 4-26-06
Class: Individual Vision
Instructor Name: Janell Baxter

Final To-Do List

Priorities

1) Level 1
   a) make panda habitat becoming visible more distinguished (maybe using sound) and maybe make something happen if you don’t click it after x amount of seconds
   b)

2) Level 2
   a) add background music (use same one as level 1) – if have time, look for another one
   b) take out clock ticking
   c) word balloons: distinguish between when you need to click that balloon and when you don’t (for instance, elephant sound for needing to click peanuts and/or when clicked)

3) Level 3??????????????

4) Font On Mission Pages To Be More Easily Readable?
   have comic sans font with the colored text still in calvin & hobbes font

5) Ending (need some kind of big reward, explosion when the user finishes the game)
   a) animal party
   b) balloons
   c) animal rampage
   d) etc

6) Production Guide Documentation (If you were to remake it, what specifically would you need to know)
   a) visually: fonts, colors, dimensions
   b)

7) Gather ALL Documentation
   a) feedback from final user testing
   b) type up all the notes, feedback, etc that is really messy right now
   c) scan sketches of things, paper prototypes
   d) put all documentation into one big professional PDF with multiple pages

8) Packaging (something that may not necessarily be given away but needs some kind of packaging for final piece)
   name, game title, target audience & goal, website addy
   a) put it on cd?
b) cd inlet with game title, etc  
c) or mini game box  
d) or some kind of business card or post card

<table>
<thead>
<tr>
<th>Title</th>
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</table>
Project: Zoo World

By: Amy Lin
Date: 5-10-06
Class: Individual Vision
Instructor Name: Janell Baxter

LAYERS (in exact order as seen on screen)

- trigger
- level
- help
- titlemenu
- clock
- background
- framelables
- code

EXAMPLE for FRAMES content only on titlemenu layer

Frame Label:
start

Actionscript:
frame1-4.txt

Game Title Colors:
#009900 (grass green) & #FFCC00 (yellow-orange)

Fonts:
Calvin & Hobbes & Comic Sans

Buttons:
#3366CC for play, how to play, level 2 buttons
#990000 for url button
koalamovie MC
ZOO WORLD
Production Guide –
Screenshots of Frames
Production Guide – Screenshots of Frames

Project: Zoo World
By: Amy Lin
Date: 5-10-06
Class: Individual Vision
Instructor Name: Janell Baxter

FRAMES 1-4

how to play
play!
LEVEL 2

Zoo World by Amy Lin 4-26-06

back to my portfolio
1) You start with only habitats so you need animals to fill those habitats.
2) You need to raise money in order to buy animals, habitats, and other things for your zoo.
3) Click on each visitor before they leave the screen to get more money otherwise you lose money.
FRAMES 8-9

Zoo World

How to play - 2

VISITOR TYPES

families  $60
couples  $15
school groups  $100

seniors  $5
tourists  $50

back

play!
FRAME 15

LEVEL 1 MISSION

Hello, Master ZooKeeper!
Today is your first day opening the zoo! Raise $1000 so you can buy an Elephant, a Camel, a Cheetah, and 2 Bears for your zoo.

Money will be added or subtracted automatically in this box. Click on as many visitors as you can to let them in before time runs out and before the visitors pass the ticket booth or else you will lose money! You will be able to unlock more animals and habitats and fill up the zoo as you finish more levels. Good luck!

play!
FRAME 16

your total: $50

time left: 30

L1

goal: $1000
couples: $50  school: $100

you got $500
now click me to
get a panda
habitat!
Sorry! You need at least $1000.
Please try this level again!
Project: Zoo World

By: Amy Lin
Date: 5-10-06
Class: Individual Vision
Instructor Name: Janell Baxter

SOUNDS

Sounds were taken from:
http://www.animalpicturesarchive.com/animal/SOUND/
http://www.partnersinrhyme.com/soundfx/animals/BigCats.shtml
http://www.georgetown.edu/faculty/ballc/animals/
http://www.findsounds.com
http://www.ilovewavs.com

Jazz background theme had to be sped up using Audacity by Amy Lin.

IMAGES

Animated Gifs of fireworks were taken from:
http://www.uselessgraphics.com/fireworks1.htm

Other graphics were drawn/animated by Amy Lin.

GAME DESIGNED AND CREATED BY AMY LIN FOR A SENIOR THESIS PROJECT IN SPRING 2006