



Pirate Challenge is an educational prototype designed to teach Kindergarten and First graders. General math and language skills are taught within the pirate themed interface. The full scope of the project also included a “story mode” but the question development portion filled the time allotted.

This process book reviews early project ideas, concept art used, development screen shots and early test examples. Prior to this class my ActionScript abilities were very limited and focused on AS2. Most flash projects involved numerous frames and scenes and very little scripting. That changed shortly after this class.

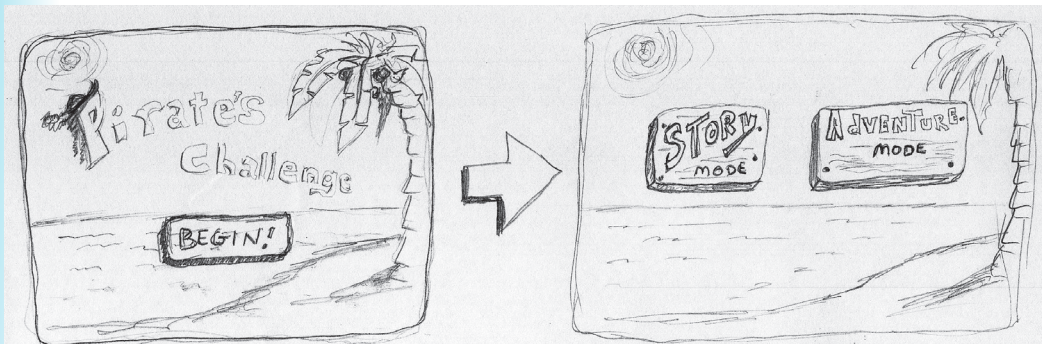
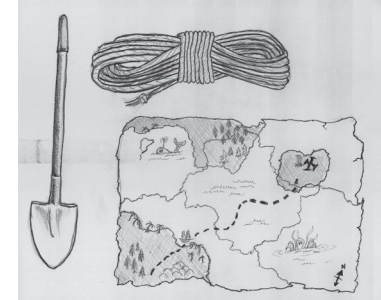
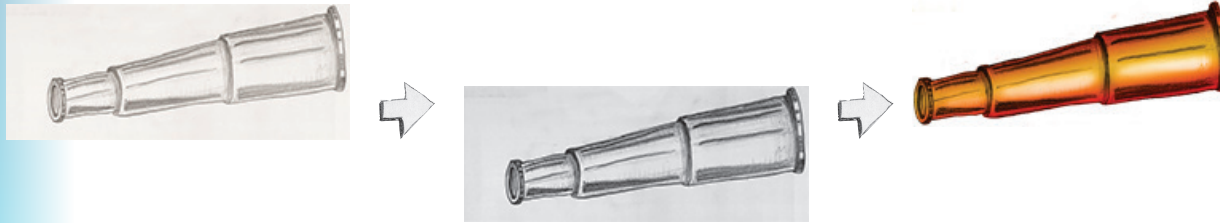


**Chad Fillion**

Visual Interface/Info Design ITGM 709: 11/12/12  
Pirate Challenge Educational Activity

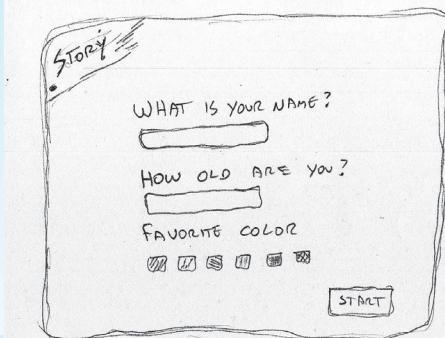
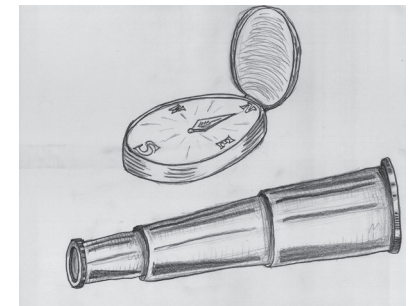
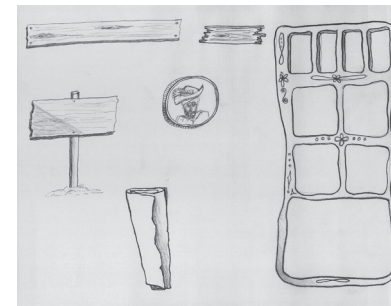
Process book compiled 10-17-14  
Page 1 of 10

# Concept Sketches & Production Roughs

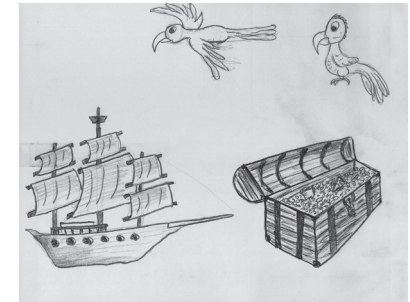
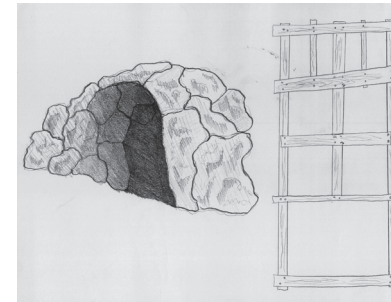
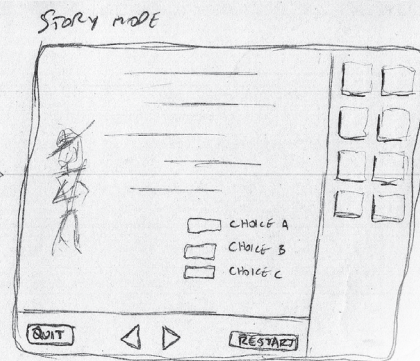


SPLASH SCREEN

STORY / ADVENTURE MODE  
SELECTION SCREEN



NAME DATA FOR USE IN GAME  
AGE DATA FOR LEVEL CHOICE  
FAVORITE COLOR FOR SKIN/PARTS



Early in the design process I wanted to develop a hand drawn interface to give the entire program a cartoon feel. I began with the pirate theme and felt the reward/treasure analogy would work great for young kids. Shortly after drawing these sketches I quickly moved to early prototypes within the Flash program.



**Chad Fillion**

Visual Interface/Info Design ITGM 709: 11/12/12  
Pirate Challenge Educational Activity

# Early AS2 Tests

```
1 on (release) {  
2   no.text = "";  
3   if (ans.text == "8"){  
4     no.text = "";  
5     yes.text = "Good Job";  
6     play();  
7   }else{  
8     no.text = "Try again.";  
9     ans.text = "";  
10  }  
11 }  
12  
13 on (keyPress "<Enter>") {  
14   no.text = "";  
15   if (ans.text == "8"){  
16     no.text = "";  
17     yes.text = "Good Job";  
18     play();  
19   }else{  
20     no.text = "Try again.";  
21     ans.text = "";  
22   }  
23 }  
24
```

```
1 green1._visible = false;  
2 green2._visible = false;  
3 red1._visible = false;  
4 red2._visible = false;  
5 if (test1 == true){  
6   if (opt1 == true){  
7     green1._visible = true;  
8   }else if (opt2 == true){  
9     red1._visible = true;  
10  }  
11 }else if (test1 == false){  
12   if (opt1 == true){  
13     green2._visible = true;  
14   }else if (opt2 == true){  
15     red2._visible = true;  
16   }  
17 }  
18 stop();  
19
```

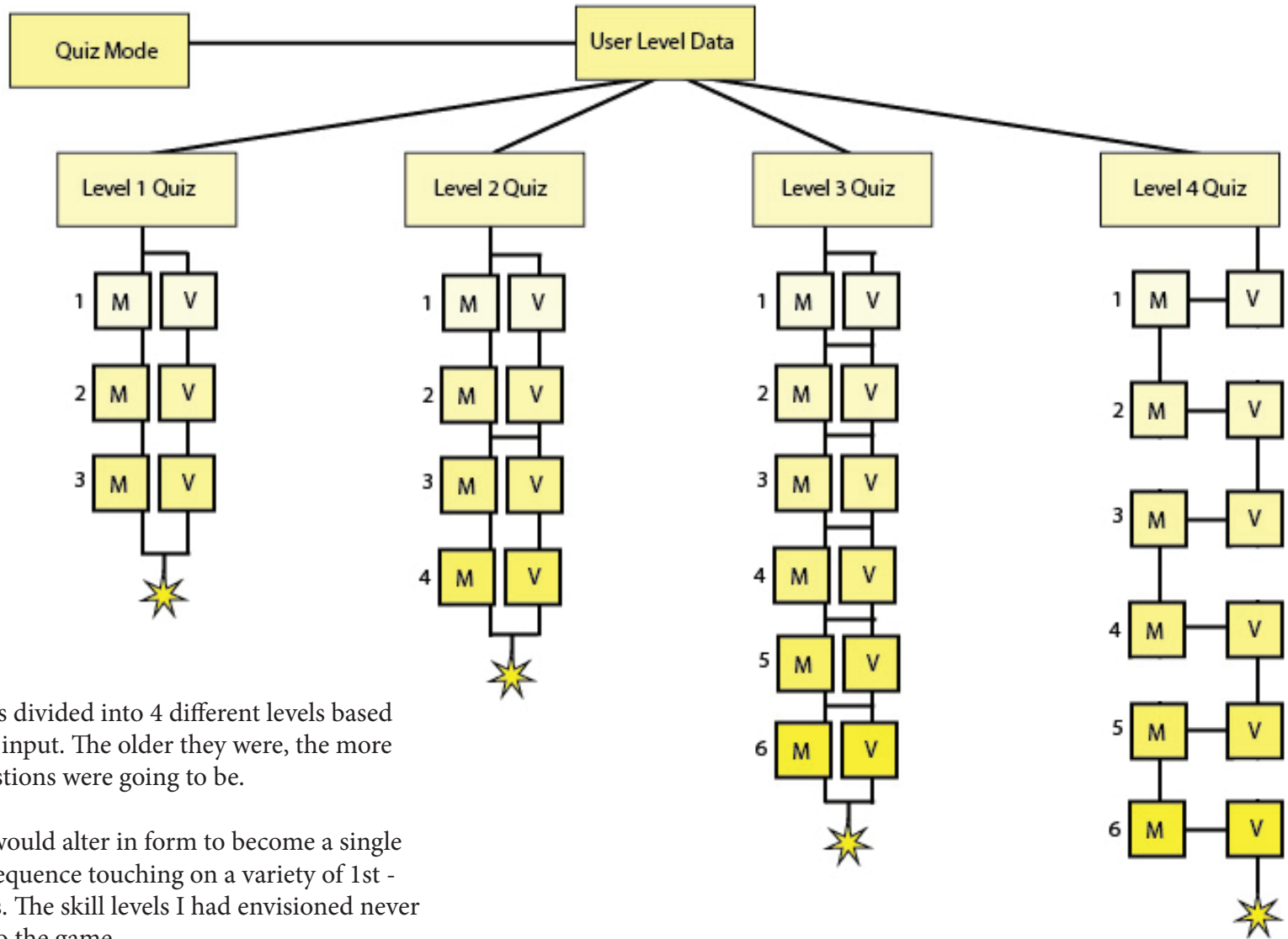
With only the ActionScript knowledge I had learned from the class, I began focusing on the fundamentals of writing to the screen with dynamic text fields and the use of if statements. These early tests worked with time line navigation as well as visibility settings and Booleans.



**Chad Fillion**

Visual Interface/Info Design ITGM 709: 11/12/12  
Pirate Challenge Educational Activity

# Quiz mode early question map



The quiz mode is divided into 4 different levels based on the users age input. The older they were, the more difficult the questions were going to be.

Eventually this would alter in form to become a single track question sequence touching on a variety of 1st - 2nd grade topics. The skill levels I had envisioned never fully made it into the game.

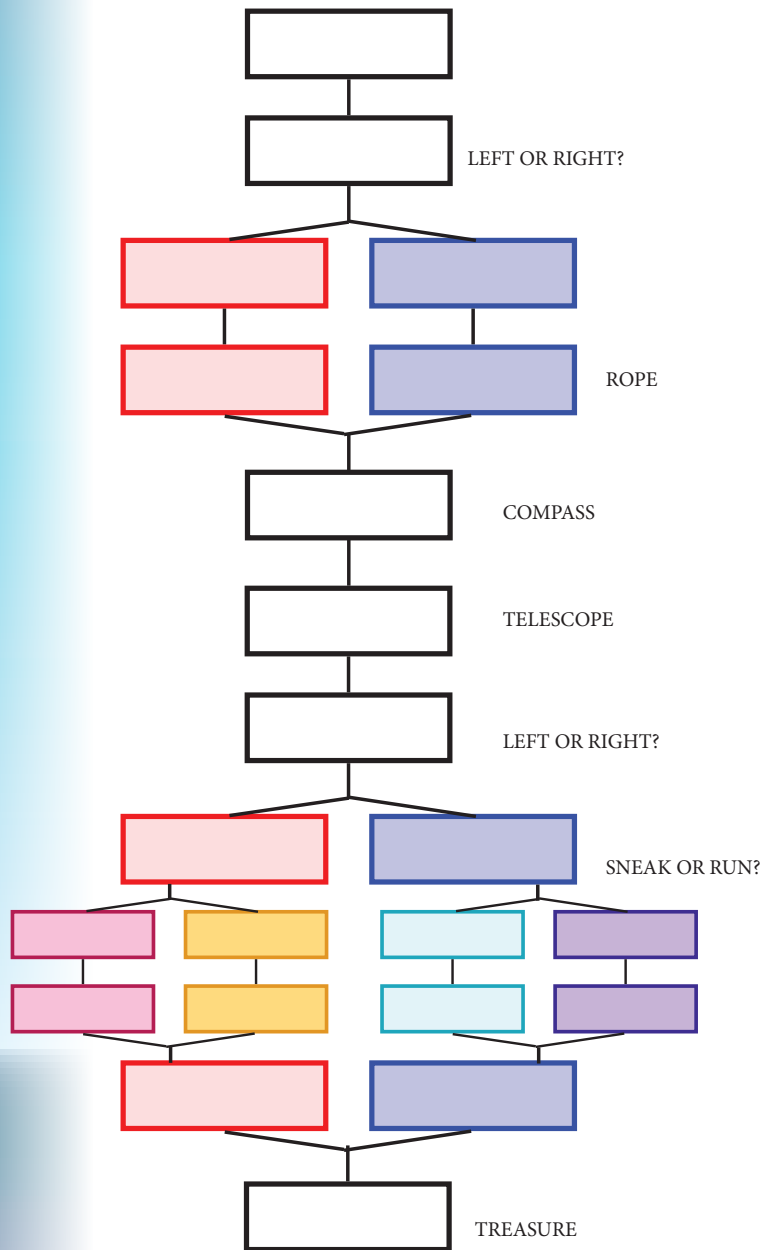
Once I was confident I could accomplish more robust interface options, I set out to establish a framework for the project as a whole. There was two parts I wanted to include in the project; a quiz mode, and a story mode. Unfortunately the quiz mode was the only section that became a working prototype.



**Chad Fillion**

Visual Interface/Info Design ITGM 709: 11/12/12  
Pirate Challenge Educational Activity

# Story mode outline



Pirate Challenge story mode:

TOOLS: Shovel, Rope, Telescope, Compass

Now that you have completed all of the challenges and have earned your rewards, it is time to head out on an adventure. You and your pirate friend head out on a journey to find your treasure. You see a bottle wash up on the beach. You open the bottle and find a map. The map tells you to follow a path.

Along the path you see a fork in the road. The map doesn't show the fork... Do you go Left or Right?

<<CHOICE A - LEFT>>

<<CHOICE B - RIGHT>>

<p>Travel down the path along the cliff side See a parrot flying by squaking Approach the cliff edge How do you get down? !!!! USE THE ROPE !!!! Land on the beach</p>	<p>Head to the right through the forest Hear parrots calling in the distance See a river in your way with a large tree How do you cross the river? !!!! USE THE ROPE !!!! Follow path come out at the beach</p>
--	---

At the beach the map leads you across the water to the island. You see a boat and climb on. The map says to head NNW... which way is that?

!!!! USE THE COMPASS !!!

With a heading, Your friendly pirate friend sails you out to sea. On the water you travel for a bit but now you are close to land...Where should we land the boat???

!!!! USE THE Telescope !!!

You land on the beach and there are two paths to take. The map shows the "X" on the other side of the island, near a large waterfall... Which path do you take?

<<CHOICE A - LEFT>>

<<CHOICE B - RIGHT>>

<p>Head through the woods to the left Come to a group of thieves... What do you do? &lt;&lt;Run Past&gt;&gt; &lt;&lt;Sneak Past&gt;&gt; RUN: As you run past them a pirate sees you The pirate chases you so you run faster. you go along the path and try to lose him. you out run him and come out near a clearing. you see the waterfall in the distance. SNEAK: While sneaking past the pirate The parrot squaks "get the treasure" Thieves get up and head down the path ahead of you. You see a clearing and move around them You come out ahead of them and see the waterfall.</p>	<p>Going along the path to the right you see a cave As you get close to the cave you hear noises from inside. BATS. What do you do? &lt;&lt;RUN PAST&gt;&gt; &lt;&lt;SNEAK PAST&gt;&gt; RUN: As you run past the cave you trip. You fall in front of the cave and see all of the bats You get up quick before they fly out you head down the path and see the waterfall in the distance. SNEAK: As you sneak past a few bats fly out. they fly around your head and swoop But a parrot comes and squaks at them they fly away scared and the parrot chases after them you continue down the path and see the waterfall.</p>
---	---

At the end of the path you look at the map and see three large rocks around the "X" on the beach near the waterfall. You walk over to the rocks ... What do you do?

!!! USE THE SHOVEL!!!!

You take out your shovel and dig near the rocks. After a few minutes you hit something hard. You keep digging to reveal a buried treasure. You and your friend take it out and open it. It is filled with jewels and gold. You're rich!

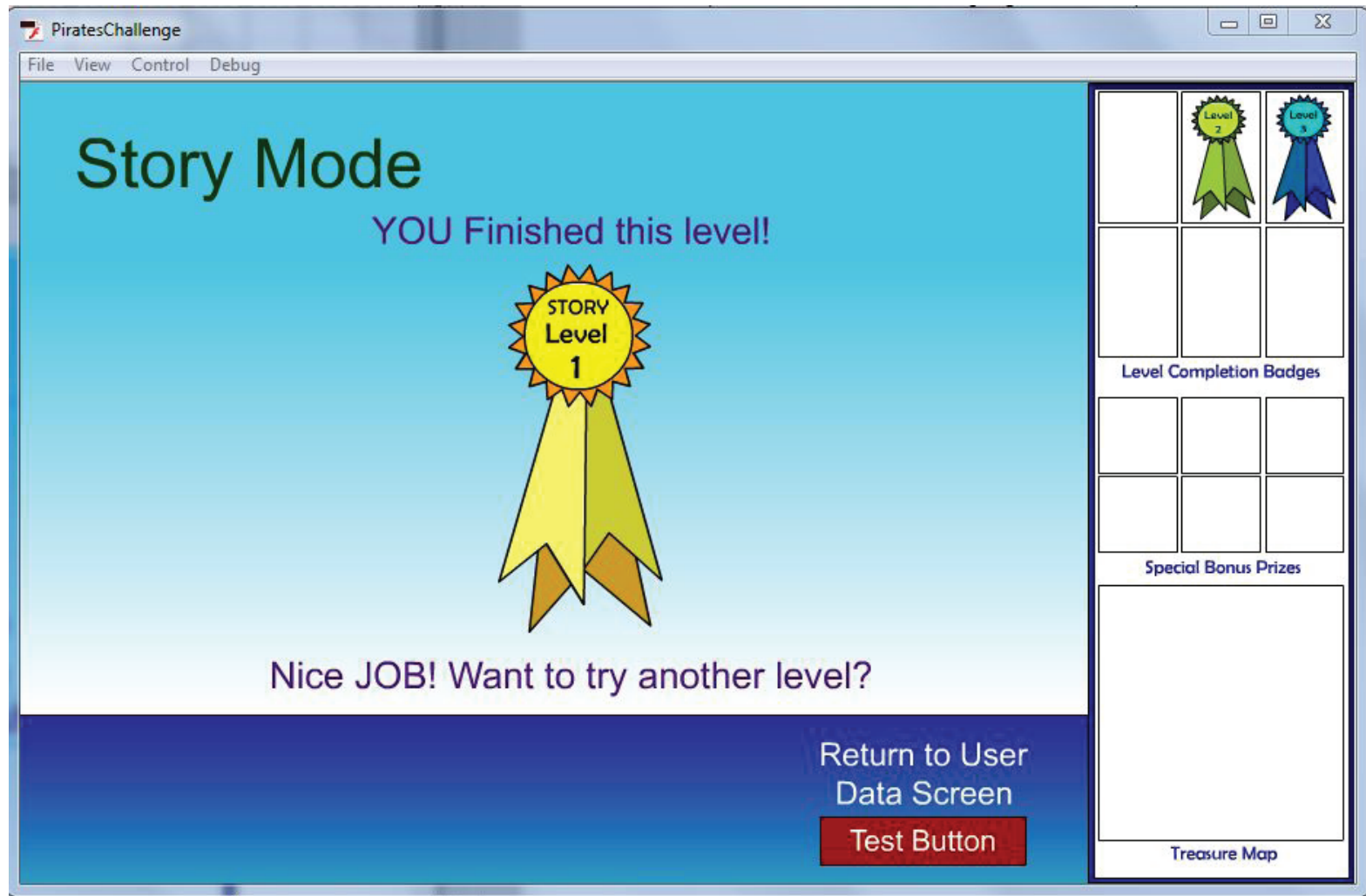
You take it back to the boat and sail back home to buy all sorts of toys! The End.



**Chad Fillion**

Visual Interface/Info Design ITGM 709: 11/12/12  
Pirate Challenge Educational Activity

# Alpha Testing



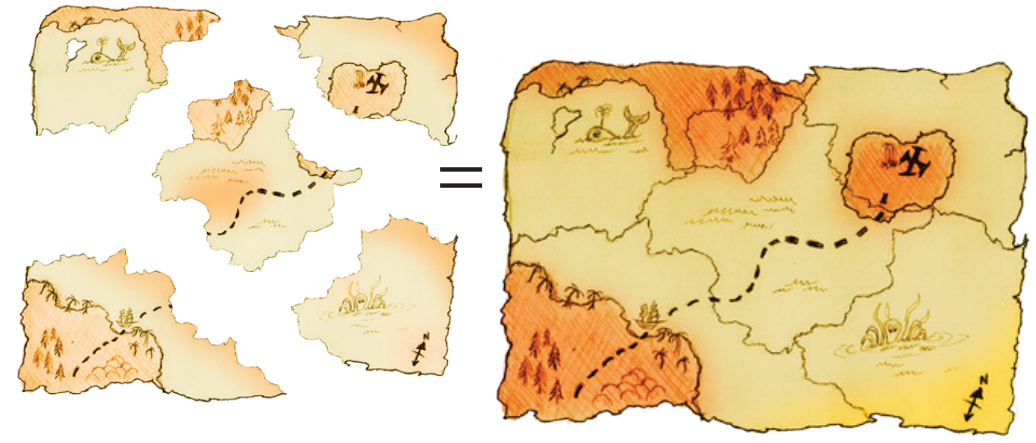
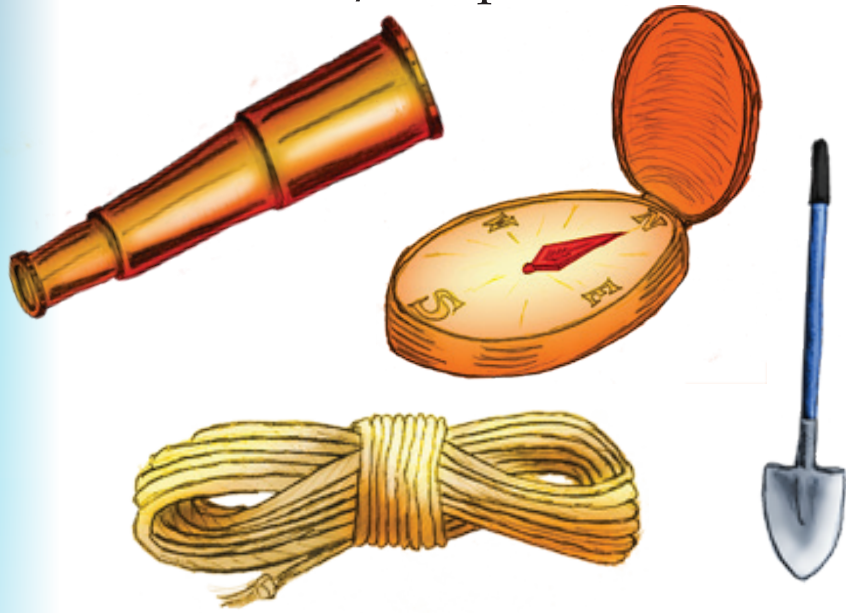
Once I had a map set up guiding the overall plan of attack, I jumped back into Flash and started to mock up the interface. I knew I wanted to have the working area large and centered on screen, and the menu set up to the right. In early stages I used ribbons as rewards and markers for achievement. Later I would add in the pirate themed treasures.



**Chad Fillion**

Visual Interface/Info Design ITGM 709: 11/12/12  
Pirate Challenge Educational Activity

# Reward tools / Map



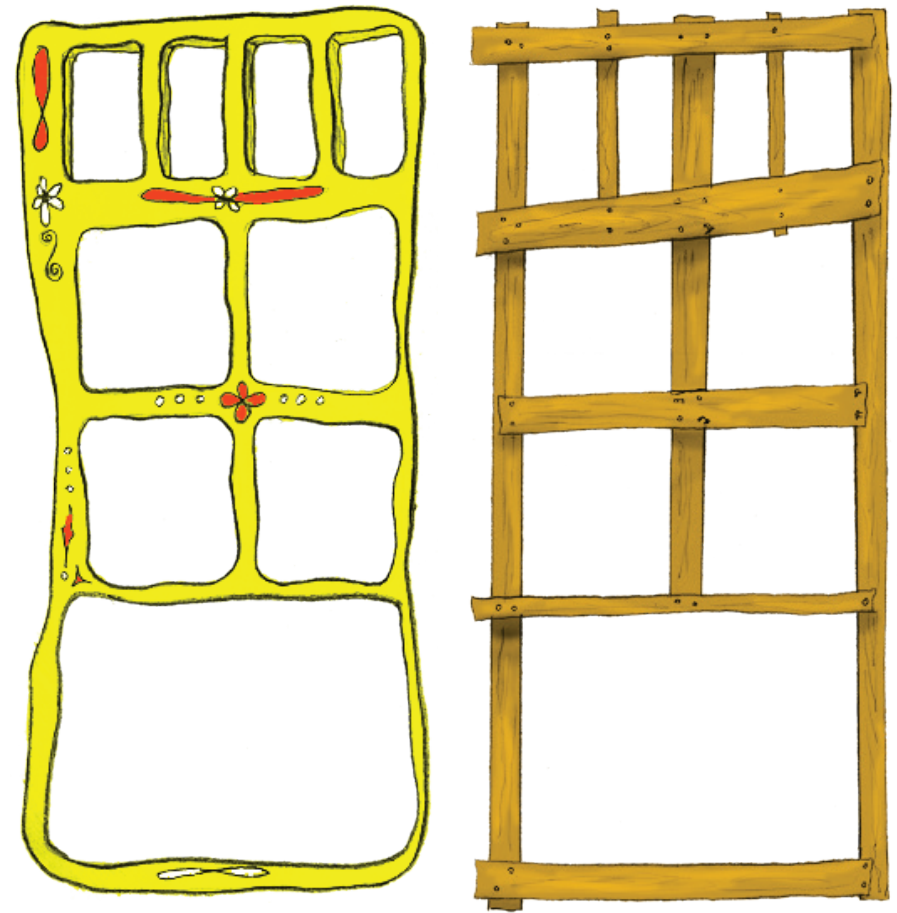
With the general game play in place I set up specific spots within the game as milestones to give the student 4 different rewards, as well as 5 pieces to a treasure map. The hope was that these tools and map would be used within the story mode yet-to-be developed.



**Chad Fillion**

Visual Interface/Info Design ITGM 709: 11/12/12  
Pirate Challenge Educational Activity

# Interface options



Girl menu screen / Boy menu screen

Using what I had tested earlier, I allowed the user to customize the interface based on their gender, and their color preference. This meant designing two versions of each color for the menu screens. Once the player has selected a color and entered their age they are ready to begin the game.

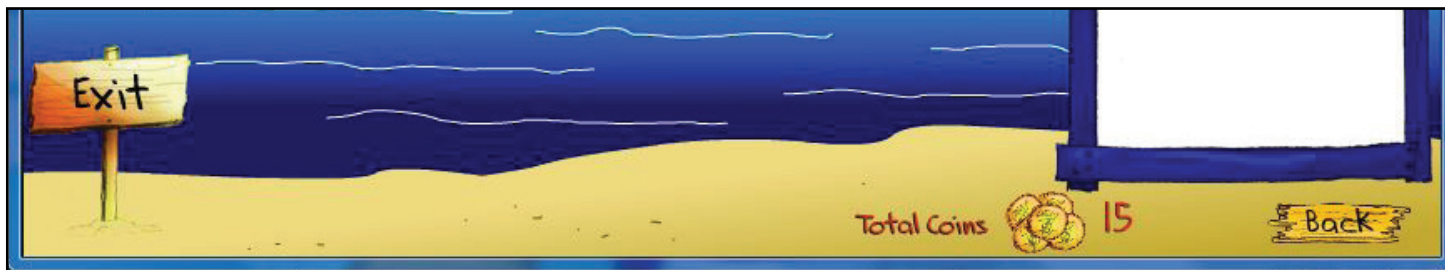
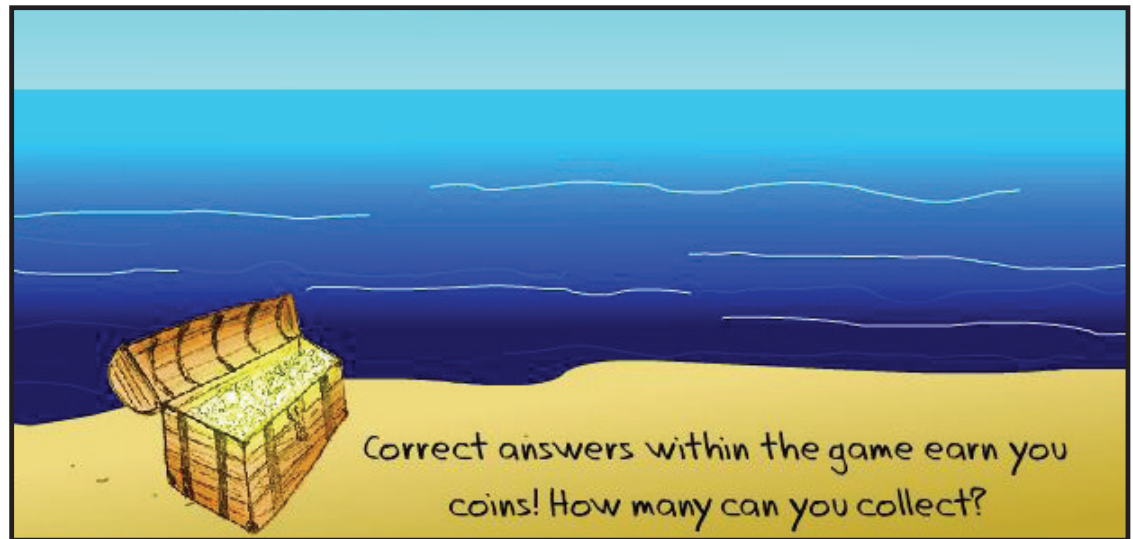
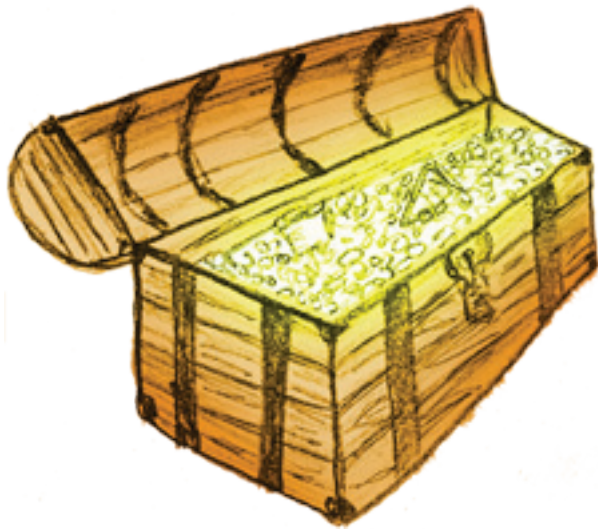


**Chad Fillion**

Visual Interface/Info Design ITGM 709: 11/12/12  
Pirate Challenge Educational Activity



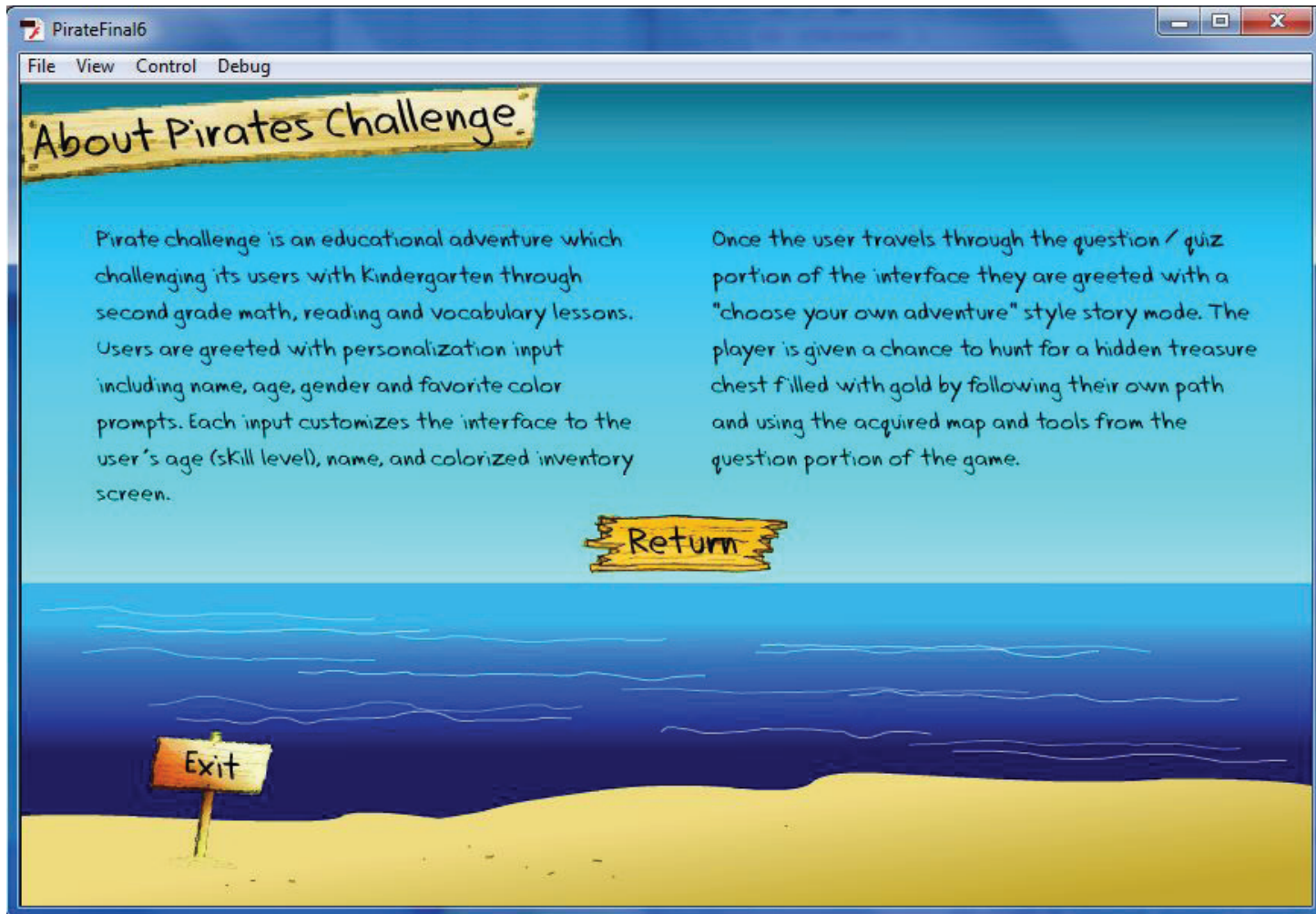
# Additional perks



With the game nearly complete I felt a scoring system needed to be added to help students feel as though they were accomplishing something along the way. Early tests with my children had them saying things like “what do I get?” This let me to add the gold coins as a form of points to run a tally of the correct answers.



# Final touches



With the dynamics in place, the score calculating and the logic working the last finishing touches were to add sound effects and background music. I added effects for the coins, earning prizes, wave sounds and music. Lastly I added in this overview page to help users with a description of the project.



**Chad Fillion**

Visual Interface/Info Design ITGM 709: 11/12/12  
Pirate Challenge Educational Activity