

# Mobile Apps Project Notebook

10.06.2017

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	Beta Version	Final Version
.aia Files (Source Code)	<a href="#">CSE1_Xu_Sarin_Get_the_Go ld_Beta.aia</a>	<a href="#">CSE1_Xu_Sarin_V2.aia</a>
.apk Files (Packaged App)	<a href="#">CSE1_Xu_Sarin_Get_the_Go ld_Beta.apk</a>	<a href="#">CSE1_Xu_Sarin_V2.apk</a>

Shelja Sarin and Derek Xu

PLTW

CSE Per. 1

Mr. Kaehms



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# Brainstorm

## Tutorial Ideas

1. Mole Mash 2 with sprite: <http://explore.appinventor.mit.edu/ai2/molemash-2>
2. **Space Invaders:** <http://explore.appinventor.mit.edu/ai2/space-invaders>
  - Could add retro sprites so it would look more like the original
  - Could add powerups or bosses
  - Powerups could make bullets do special things
3. Mini Golf: <http://explore.appinventor.mit.edu/ai2/minigolf>
4. **Get the Gold:** <http://explore.appinventor.mit.edu/ai2/get-gold>
  - Currently the game we looked at is buggy and not very smooth
  - Could add new features, such as tilting the screen to move
  - Shaking to reset the game
  - Add a timer and score for the game
  - Add obstacles
5. Quiz Me: <http://explore.appinventor.mit.edu/ai2/quizme>

## Final Idea

### Get the Gold

The game's objective will be to get the pirate ship to collect the most gold. The user will be able to move the ship by flicking it in the direction they want it to go. We can add a scoreboard and maybe different levels. We chose this as our top choice because Space Invaders was not available to us and we liked how we could add a lot of customizations to it.

We chose this as our top choice because Space Invaders was not available to us and we liked how we could add a lot of customizations to it.

**Tier 1:** What are all the basic features we need to get done first?

We would like to finish coding the actual basis of the game before we try to add anything to it. After, we would like to add a timer to the game and a score system so we can add more onto it later.

**Tier 2:** What are features that would make our app better that we could still get done in a reasonable time?

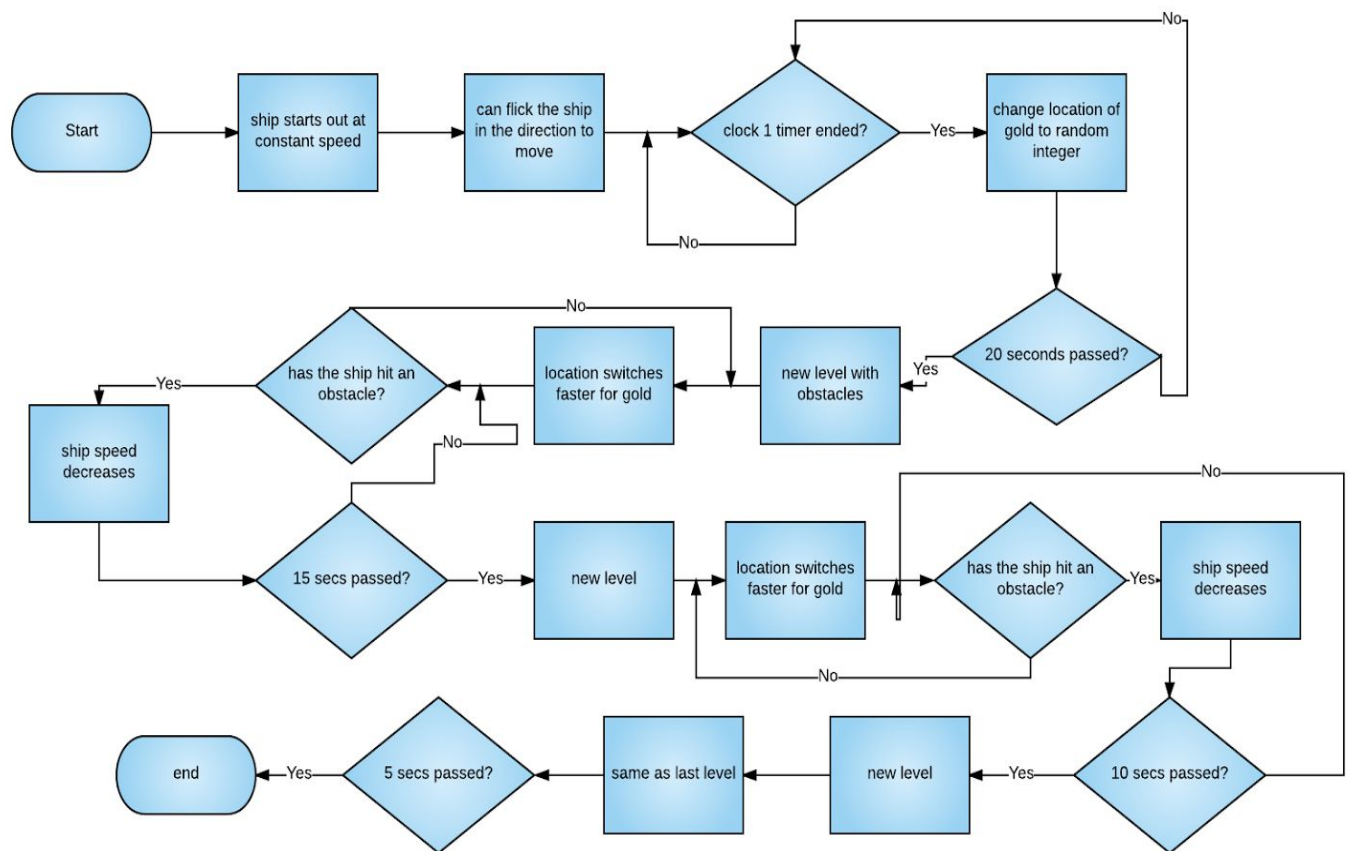
We want to implement the feature of a scoreboard and timer the most, so that will be our top priority. We can also add several levels that would increase in difficulty. We will also

work on things such as obstacles to slow down the player or decrease their score. We could add sharks, oil spills, octopi, and a number of other items to prevent the player from scoring.

**Tier 3:** What are the really cool/awesome features we want to do, but might not have time for?

We thought about adding some power ups to make our boat have special abilities but we aren't sure how we could code that or how long it would take. We were thinking of adding a grappling hook to propel the boat to a wall or a magnet to attract coins but we aren't sure how long that would take.

## Flowchart



## Feedback

Subash: You guys should put a tsunami or bombs to kill you in the game.

Ethan: You guys should add projectiles that will make you lose coins if they hit you.

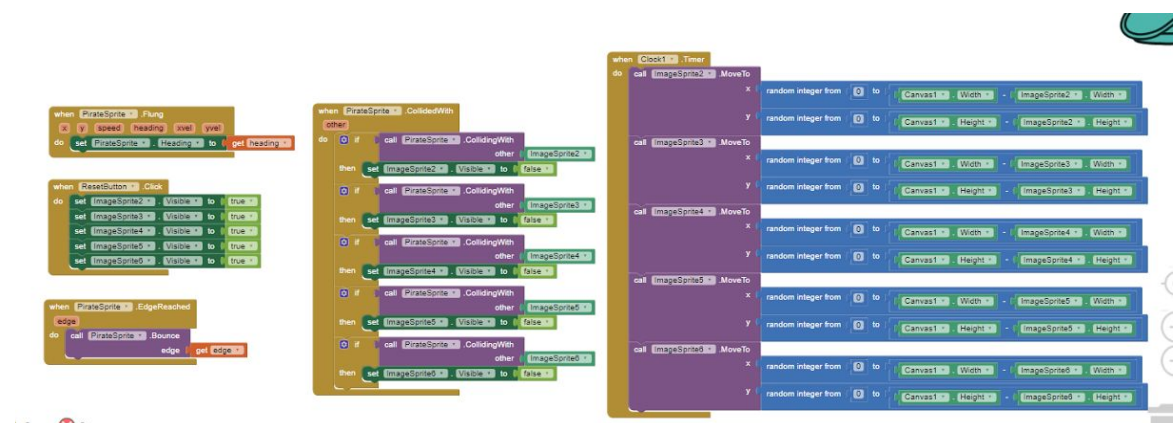
# Daily Log

## Day 1- 9/19/17

Today our goal was to decide which game we would be choosing. We went through the list of games and filled out the form. Our choices in order were Mole Mash, Space Invaders, Mini Golf, Get the Gold, and Quiz Me. We set up our notebook/project log as well and began answering some of the questions. Reflection: We did a pretty good job for the first day of the project and we understood the project and what we needed to do.

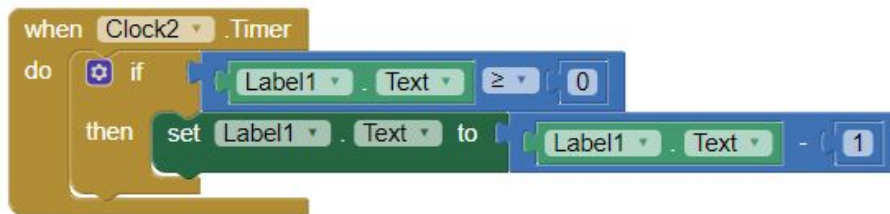
## Day 2- 9/20/17

Today, we found out our game would be the Get the Gold game. We coded the game on the app inventor and started to experiment with it. We tested the actual game and came up with more ideas on what we could add to the game. This was done in class and at home. We plan to finish the flowchart and continue coding tomorrow in class. Reflection: We started out very efficiently and we are very ahead in the project. This is version one of our game.



## Day 3- 9/21/17

Today we began to experiment with things we would like to add such as restricted level time. We also finished the flowchart and finished the rest of the brainstorming. We started adding a timer by adding a label on the screen to show the actual numbers. Then, in the code we made the label subtract by one until it equals zero. This is the start of our timer, because we need to add some code that tells the boat and the coins to disappear or freeze when the timer equals zero. This is version two of our game. Reflection: We did a lot of brainstorming and came up with creative ideas.

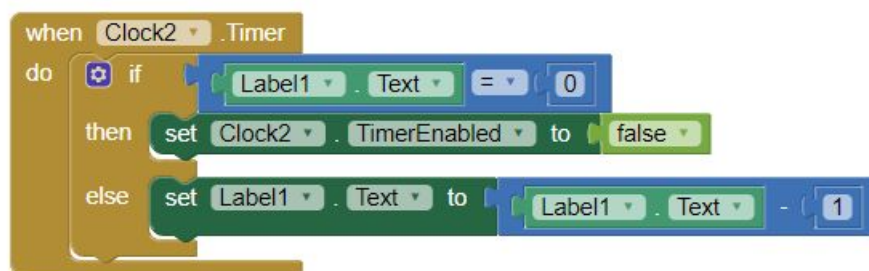


### Day 4- 9/25/17

Today we presented our brainstorming to the other groups and we received feedback on our idea. We continued editing our code to add improvements to our game and further develop it. Now that we had our timer, we have to figure out how we can manually reset it to a number of our choosing. Reflection: We received good feedback and we were on task.

### Day 5- 9/26/17

Today we figured out yesterday's problem of how we can change it. We switched our timer to if it is equal to zero, it will set Clock2.TimerEnabled to false and turn off the timer. We can just set Clock2.TimerEnabled to true when we want it on and set it to false if we want the timer off. We can also set the label to a specific number for how long we want it to last. We can change this number depending on how difficult we want that specific level to be. We've also added a scoring system, where it adds one every time you get a coin. We just created a variable called "score" and it gets added on everytime it touches a coin. We also changed the gold and boat sprite so they look nicer now. We plan to work on different levels and backgrounds after the beta-gallery walk. This is version three of our game. Reflection: We were on task and we got a good amount of work done.



### Day 6- 9/27/17

The Beta-Gallery Walk got postponed to tomorrow so today we are going to type up the instructions for the game in preparation for tomorrow. We also found sprites that will slow

the ship down. We decided on a shark and octopus as obstacle sprites. We also decided to keep the game to only one level to keep it simple and achievable due to the time given for the project. The sprites are shown below. Reflection: A lot of the work we did was on documentation and some more brainstorming.

## Day 7- 9/28/17

### BETA-GALLERY WALK

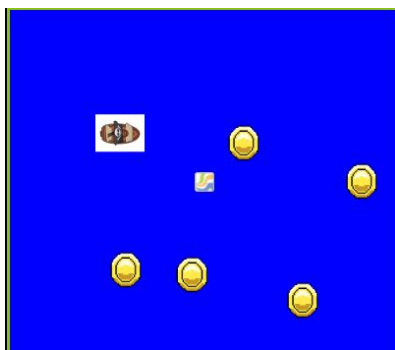
Reflection: It was cool to see the different projects and we received good feedback.

## Day 8- 9/29/17

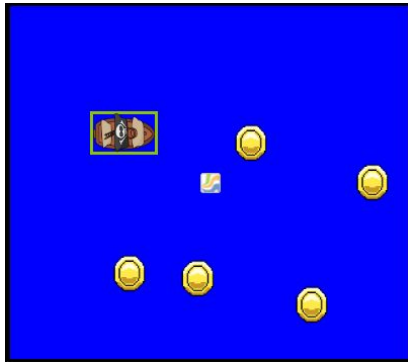
We fixed the bug where the game would still play after the timer ends. Now the game freezes and displays the final score achieved when the timer reaches zero. Before, the code told the game to turn off the timer after hitting zero, and after it turned it back on, the boat wouldn't be able to pick up any coins anymore. We removed that block of code, and now our game works. This is our finalized beta version of the game and we have made a copy for the final version. Reflection: We worked a lot on fixing bugs and improving the game.

## Day 9- 10/2/17

We tried to add more gold coins to the game since we received in the feedback that 5 coins were not enough. We added another timer with a duration of 5 seconds so the coins will all come back every 5 seconds. We also want to fix our boat, it is going backwards in the game and we will edit the photo to see if it'll fix it.



Our problem was partly fixed, it is going the right way but the background of the boat is white so we are trying to fix it now.



We used pixlr to edit the boat photo to flip the transparent image instead of screenshotting and flipping now and it works. Reflection: We were able to successfully fix the problem and improve the game.

### Day 10- 10/03/17

We tried adding another improvement to the game by making it harder with obstacles. We were able to load it onto the screen, but we were not able to make the obstacles move on the screen. We wanted them to glide across. We also added more description to the documentation. Reflection: We were able to add obstacles, however we had trouble making it glide across the screen. We were not as successful today. This is version six of our project but we plan to continue working on this same version tomorrow due to it not working.

### Day 11- 10/04/17

We were able to make the obstacles integrated into the game without interfering with anything else. There are two obstacles: one octopus and one shark. If you touch the octopus then you lose a point. If the shark gets you then the game ends and your ship is stuck. This is the continuation of version six from yesterday and our final, complete project. Reflection: We finished the entire game and the game works properly. Our game is ready to be packaged. Reflection: We finally finished our game and it works how we wanted it to work :).



# Gallery Walk Feedback

## Beta-Gallery Walk

### Instructions:

- ❖ The game will automatically start.
- ❖ The objective of the game is to get as much gold as you can in 20 secs.
- ❖ You can move the ship in the direction you want by flicking it with your finger.
- ❖ You obtain gold when the ship touches the gold.
- ❖ The start button will restart the game again if you want to play again.

Pro: Features Liked	Con: Aspects that were confusing, buggy, or etc.
<ul style="list-style-type: none"> <li>Nice graphics -Jeff Cheema</li> </ul>	<ul style="list-style-type: none"> <li>Fix timer</li> </ul>
<ul style="list-style-type: none"> <li>Nice layout of getting gold coins in the ocean with a boat - Samiksha</li> </ul>	<ul style="list-style-type: none"> <li>Timer is not working, and player swipe really hard to move the boat, boat is going backwards</li> </ul>
<ul style="list-style-type: none"> <li>When playing the game it does work fine</li> </ul>	<ul style="list-style-type: none"> <li>The boat is way too slow and it seems that after five points gold stops generating</li> <li>Make it so that you can swipe anywhere on the map to make the boat change directions</li> </ul>
<ul style="list-style-type: none"> <li>Swiping is a unique feature</li> </ul>	<ul style="list-style-type: none"> <li>Make the game playable after 5 points are made</li> </ul>
<ul style="list-style-type: none"> <li>Good game concept</li> </ul>	<ul style="list-style-type: none"> <li>I think there should be more than five coins total</li> </ul>
<ul style="list-style-type: none"> <li>Gathering all the coins is fun! - Soleiman Qazi</li> </ul>	<ul style="list-style-type: none"> <li>There should be something after the time runs out.</li> </ul>
<ul style="list-style-type: none"> <li>The game is fun and makes sense</li> </ul>	<ul style="list-style-type: none"> <li>You can add levels after getting a certain amount of gold and make the time reset when you do</li> </ul>
<ul style="list-style-type: none"> <li>The game is nice graphic wise and the concept of the game is nice</li> </ul>	<ul style="list-style-type: none"> <li>The swiping function could be improved and I feel that the speed of the boat should be increased</li> </ul>

## Final Gallery Walk

### Instructions:

- ❖ To start, find game on the home screen or if the game is already on press the replay button
- ❖ The game will automatically start.
- ❖ The objective of the game is to **get as much gold as you can in 20 secs.**
- ❖ You can move the ship in the direction you want by flicking it with your finger.
- ❖ You obtain gold when the ship touches the gold.
- ❖ **WATCH OUT! There are obstacles!**
  - If you sail over the **octopus your score will decrease by 1** each time you hit the octopus.
  - If you get too close to **the shark, your ship will stop** and cannot be controlled → basically **game over**
- ❖ Replay button restarts the game if you want to play again

Pro: Features Liked	Con: Aspects that were confusing, buggy, or etc.
The timer component makes the game much better.	While the background is beautiful, it could be more detailed.
The concept of the game is interesting. Good use of obstacles and a time limit.	The coins and obstacles switch over really quickly.
The game was very confusing to play, and was very laggy	This game needs some more oomph in its background and layout
Like the idea of the game.	Game is kind of lagging.
The obstacles were nice and made the game challenging	The background is bland
I like the aesthetics and the graphics	You should change the background
I like the graphics and the concept of the game. I also liked the addition of the octopus tentacle and that the game went faster	The boat stopped a few seconds before the timer ran out.

## Conclusion

Shelja's Reflection: Overall, I think that the project was really fun and our project turned out to be just the way we wanted it to be. Also, in the end, there were no bugs which was very good. In the final gallery walk, we could tell that our project improved immensely from the beta one. We had some struggles in getting the obstacles to work, but it worked in the end.