App Inventor Design Project - Jeoparody

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Period 2

Computer Science Principles

9/23/19 - 10/08/19

	Beta Version	Final Version
.aia Files (Source Code)	CSP2_Gupta_Xu_Jeoparody _Beta.aia	CSP2_Gupta_Xu_Jeoparody _Final_Version.aia
.apk Files (Packaged App)	CSP2_Gupta_Xu_Jeoparody _Beta.apk	CSP2_Gupta_Xu_Jeoparody _Final_Version.apk

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Brainstorm

- Intermediate game so that we can add more things to make it better
- Quiz Me
  - Jeopardy type game
  - Timer
  - Multiple question options about coding
    OR
  - Codecademy quizzes study guide
  - Multiple questions about things you learn on codecademy to prepare for weekly quizzes
  - Multiple choice
  - Fill in the code
  - Easy to hard questions
- Get the Gold
  - Gold is collected by sliding cart at bottom
  - Gold continuously falls down the screen
  - Add other objects that will make you lose points when collected
- Mini Golf
  - Add a timer
  - Make multiple harder levels with more obstructive objects
  - Change how hard you can hit the golf ball

Top 2 Ideas

Jeoparody	Codecademy Study Guide

- Make it so it is similar to Jeopardy
    - Has multiple questions, when question solved correctly points will be earned
    - timer
- Add sections and noise effects similar to Jeopardy
	- Has questions pertaining to Codecademy lessons
	- The questions go from easy to harder
	- Questions are times to ensure understanding of lesson
	- Multiple choice
	- Fill in the code

We choose the Jeoparody idea instead of the Codeacademy study Guide because the Jeopaordy idea allowed for more creativity. It was also more complex and seemed to be a more fun game for users, which is why we furthered developed this idea.

3 Tiers

Quiz Me (Jeoparody)

Tier 1	Tier 2	Tier 3
- Have a short quiz that asks questions - The user can respond with	- Have a multiple level quiz where user can decide which questions they want	- Have a multiple level quiz - User can respond with what they think is the

what they think is the answer - They will be graded on if they are right or wrong	to answer - User can respond with what they think is the right answer based on their answer they will earn a predetermined amount of points - Some questions are worth more points than others - Money accumulator on homepage	right answer based on their answer they will earn a predetermined amount of points - Timer - Based on if the answer is correct or incorrect user will have cheering or booing play - Settings page (turn on and off music, changing visibility) - Multiple choice - Final round - Hints - Music

Feedback

- Multiplayer
- Hints
  - Only get ½ of score if used
- Multiple choice
- Color to make it easier to see
- Music
- Sound effects
- The final round
- Play against CPU

Beta-gallery Walk

Instructions: Click on the question of your choosing. The questions get harder as you move down. Enter what answer you think is correct and click submit. If you do not know the answer, try your best or click "I don't know". Ignore the text on some of the buttons or labels for now. To begin a new game, restart the whole app.

Pro: Features Liked	Con: Aspects that were confusing, buggy, or etc.
- Good concept - Nice ones about Mr. Brown - Well thought out with all of the different screens and a lot of potential - It is a good way to review for quizzes and/or tests - Good review game.	- Try to make it so the buttons and text box doesn't change size when the keyboard is brought up - Capitalized text doesn't work - Make it so the money adds up - Should add feedback when you get a question right - More colors and aesthetics. - When the question is answered, the correct

	● and incorrect disappears too fast ● Make it so that the buttons disappear after being answered correctly ● UI needs work the categories are listed above the columns ● When you get something correct, the button does not show that you got it correct. Maybe change the color to green? ● Could make the answers not case sensitive -- i.e. uc riverside = UC Riverside = correct

Gallery Walk

Instructions: Click on the question of your choosing. The questions get harder as the amount of money increases. Click on the answer that you think is correct. If you do not know the answer, try your best or click "I don't know". To begin a new game, restart the whole app.	
Pro: Features Liked	Con: Aspects that were confusing, buggy, or etc.
● The interface looks very neat and easy to utilize! ● Like the idea of having many screens ● I like the idea of making the"Quiz Game" into a Jeopardy type game. ● Very hard to crash→ good idea ● Very functional! ● I really like the idea of the game. It works very well and is fun to play ● I like how it quizzes us on information that is relevant to this class and it is good practice ● I got to learn about Mr. Brown ● Easy to navigate ● I like the transitions between screens. It's really smooth. ● Very unique! Most likely the best game I've played. ● I like how to keeps track of the score, which I tell can many groups have struggled to add ● Nice questions. ● Game is interesting and has good questions	● The score does not change if you guess questions correctly ● Maybe show "Incorrect!" or "Correct!" a little longer? The screen disappears pretty quickly. ● Maybe add a timer to the game so that you can't spend forever on the question to make it harder ● You can press the same question multiple times and still get points from it ● The money isn't going up. ● Maybe increase the width of the buttons so you can click in the general area instead of directly on the buttons ● The score isn't going up. ● Maybe you should have added a home page; instead of just one screen. ● Could make the buttons on the home screen change color once the question has already been attempted (I kept clicking on questions I had already done after a point of time) ● Hard to understand and know what questions you have already done when playing ● Can't reset score in app to replay it later ● Change the question of the money level each time, it's the same question ● You can't lose points ● Points don't reset each time new player plays ● Maybe fix the score feature ● Add a feature to the game that ensures that

	after you get the answer wrong, you cannot retry that again

Reflection

Khushi Gupta

This app was seemingly easy to develop initially. However, as we began to work, we realized that we would need to do more work than we had initially realized. The biggest hurdle for us in making this app was the score. Our score system was different from the ones we had initially practiced, which were all on one screen. This score (accumulator) would need to have data transferred from many screens. This required a database to store and shift the information. Eventually we were able to figure out how to do so with our code. Unfortunately, the code was glitchy and were unable to make every single button function to add on to the score, only one of the buttons worked. We had to leave this problem unresolved since we ran out of time to submit the project. Based on the feedback we got from our peers, we know we had a successful idea that many people seemed to enjoy. However, there were many aspects that we would change if given more time. One of these is actually fixing the score so that it works for all of the questions, not just one. Also another problem that we had not realized but someone else pointed out is that the buttons should change color once clicked so the user can keep track of what questions they have already answered. Another interesting idea that was suggested to us was to add a time to make the game harder. Mainly the feedback we got was focused on technical aspects, the users seemed to enjoy the purpose of the game overall.

Eileen Xu

On the first day that we started brainstorming, we were really excited when we came up with the Jeopardy-based game idea. It seemed like a very interesting and doable app with a lot of potential. The tutorial was easy to complete and only took one or two days. The score was definitely the most challenging aspect of the game to accomplish. We were quickly faced with our first major problem: how do we share information between 16 different screens? It took a few days of youtube videos and blindly testing to realize that we needed to use a TinyDB. But even after attaining that crucial piece of information, we still didn't really know how to utilize it. We kept on experimenting and eventually, after receiving some very helpful advice from Mr. Brown, we found out that we needed to fetch, change, and then store information using the TinyDB for every screen. I clearly remember how ecstatic and relieved we were when we got the score to work with one question. Even after all of that, we were only able to make the score work for one question and we'll probably never figure out what was wrong with our code. Other than that, we managed to finish everything else on our Tier 2 list. The feedback we received from the mini beta gallery walk was nice to see. People were pretty frustrated with how you had to type in the answer exactly correct, which is why we decided to change our questions to multiple choice. We also thought that changing the color of the buttons after clicking on them so that you would know which questions you already answered was a really good idea. Sadly, we did not have time to add that into our code. After the final gallery walk, we were happy to see that we received much more positive feedback. There are still a lot of things that we could do to improve upon our app (like having a score keeper that actually works), but it was great to see that a lot of people enjoyed playing our game.

Project Log

Khushi Gupta

Date	In Class	Out of Class	Team Dynamic
9/23/19	I helped brainstorm today. The tutorials that I recommend we remix are Quiz me and Mini Golf. I also set up the file for app our app in MIT App Inventor. I helped organize our brainstorm document and write down what each tier for our app would have.	N/A	We were able to work well with each other and come to decisions we both agreed with.
9/24/19	I wrote the code for the tutorial, except a modified version that would better serve as a demo for what we wanted to create. I also helped a bit with the layout for the documentation.	N/A	Today we also worked well together, helping one another whenever necessary and giving each other feedback on our tasks.
9/25/19	I commented the code as well as set up the code so that when one of the buttons was clicked it would change to the desired screen.	N/A	Together we worked together to brainstorm ideas on how we would make all the questions appear without an excessive amount of screens.
9/26/19	I gave other groups feedback and took into consideration the feedback other groups gave our idea.	N/A	We discussed about the feedback we got from our peers and how we could use it to improve upon our code. We especially talked about differentiating what we would be able to get done and what we would not be able to finish.
9/27/19	I began to more thoroughly edit the code. I worked on modifying	N/A	We both discussed the plan we had to get this project done and what

	the code so it worked as we desired it to. I also created the categories where we would place all of the question and the corresponding buttons.		we needed to complete.
9/28/19	N/A	N/A	N/A
9/29/19	N/A	N/A	N/A
9/30/19	I began adding final touches and made sure that all the questions and corresponding answers were inputted into the game. I also made all of the screens required for the game to function as we planned it too.	N/A	My partner and I discussed any future plans we had we the game, and also what we wanted to get done before the mini beta gallery walk tomorrow.
10/1/19	Mini beta gallery walk.	N/A	N/A
10/2/19	N/A	N/A	N/A
10/3/19	I began working on the layout of the code. This included changing thing like the color arrangement to make it look better and making sure everything aligned correctly. I also made edits taking into consideration the feedback we got from the mini beta gallery walk.	N/A	My partner and I collaborated on figuring out how to make a working score variable and how to store it in a database so we could have a proper score tracker.
10/4/19	I made the final touches to the layout of the code and began running through everything to make sure it was functional. I also collaborated with the partner to try to figure out how to get a functional score.	N/A	My partner and I discussed what we would have to work on in the weekend to get the project finished. We decided that I would have to insert the score counter into all of the screen to ensure we got everything done in time.

Date	In Class	Out of Class	Team Dynamic
10/5/19	N/A	N/A	N/A
10/6/19	N/A	I added the score variable to all of the screens so that they would potentially change the score variable. To do this I had to copy and paste the code throughout all the screens as well as add the Tiny DB.	N/A
10/7/19	I began to redo the code for the score value because it did not work and needed button to function instead of text input.	I redid the rest of the levels to have buttons instead of type text answers. To do so I had to rewrite a majority of the code to include button and then change the colors so it was correct according to the theme. I also added the comments throughout the entire code.	My partner and I worked together of figuring out why the score was not working. Eventually we were able to help each other and solve the problem
10/8/19	Final gallery walk.	I worked on finishing up my part of the documentation.	N/A

Eileen Xu

Date	In Class	Out of Class	Team Dynamic
9/23/19	I helped brainstorm and recommended one of our options, Get the Gold. We decided on a final idea with 3 tiers. Then I helped set up and organize the notebook.	N/A	We were able to communicate well and come to an agreement on which tutorial we would follow.
9/24/19	I worked on finalizing the layout of the notebook and making the questions and an answer key for our quiz. I also helped look over Khushi's code.	N/A	We worked a little more individually today, but still checked in with one another frequently to provide assistance and ask for each other's opinions.

9/25/19	I helped create the homepage for our jeopardy by making all of the buttons and labels.	N/A	We communicated well today and were able to troubleshoot together on how to get all of the buttons to stay on the screen.
9/26/19	Coded a little bit more and received feedback from peers.	N/A	We talked about the feedback we got and discussed which ones seemed interesting and which ones were not possible to accomplish.
9/27/19	Worked on making the layout for the homepage and accumulator for the scorekeeper.	N/A	Communicated well and discussed what is going to be done over the weekend
9/28/19	N/A	N/A	N/A
9/29/19	N/A	Attempted to figure out how to use TinyDB1 for transferring data from two different screens.	N/A
9/30/19	Helped with code and prepared for the mini beta gallery walk tomorrow.	N/A	We communicated well and frequently checked in with one another.
10/1/19	Mini beta gallery walk.	N/A	Discussed the feedback we got and decided what we need to work on until the final deadline.
10/2/19	N/A	N/A	N/A
10/3/19	Helped code and figure out how to do score keeping.	N/A	Communicated well and frequently talked with one another about what we were doing.
10/4/19	Figured out how to keep score on multiple screens and helped code/design.	N/A	We communicated well today and were able to decide what needs to be done until Monday.
10/5/19	N/A	N/A	N/A
10/6/19	N/A	N/A	N/A

10/7/19	Finished writing the options for the multiple choice questions and helped wrap up the code.	N/A	We were able to communicate well discussed what we needed to do to prepare for the final gallery walk tomorrow.
10/8/19	Final gallery walk.	Tried to get the score to work for more screens.	N/A