# **Final Project Report**

**Omelettes Jeopardy Game** 

Team Name: Omelettes

## **Team Members:**

Divya Chandrupatla, dc42575, Software Developer Parth Mathuria, pm27762, Software Developer Raja Akula, ra34426, Software Developer Kavya Ramamoorthy, kr28398, Software Developer

# **Project Description:**

A game coded in Java that highlights key topics regarding Computer Security in relation to this class. Two users will be able to play against each other and rack up the most points regarding computer security. The format of this game is "jeopardy." There are five categories, and within each category, there are five levels of questions. Two players will alternate in picking these questions and gaining points for those answered correctly. The points based system encourages the students (or the two users) to learn more about computer security in order to win the game.

## **Project Progress Status:**

We finished our game by adding in advanced functionality like allowing two players to play together. Additionally, we finished up any project related documentation and cleaned up/commented the code.

#### Timeline:

Completion Date	Activity	Status
3/28	Finish Project Proposal	Complete
3/31	Gather Information on RSA	Complete
3/31	Finish Update 1 Documentation	Complete
4/2	Formulate questions with different difficulties.	Complete
4/7	Code Basic Game Format	Complete
4/7	Finish Update 2 Documentation	Complete
4/14	Complete Project + Documentation	Complete

### Any Changes:

We had no changes for our project. During the second phase of this project, we deliberated on whether to remove the double user feature. When trying to code the switch between two users, especially when the first player gets the question wrong, the question frames would always disappear. It would not allow the second user to have a shot at answering the questions. We tried many solutions, such as creating new questions frames and clearing the answer. After trying many solutions, we were able to tackle this problem and keep our 2 user implementation. Our solution was to create a different answer button for the second user. We created a nested action listener handler within our check answer method for this new button. This prevented the question frame from disappearing and allowed player two to answer.

#### Teamwork:

The team worked cohesively and efficiently. Each of the four members had a set of tasks to complete. In order to ensure that we were all on the same page, we created a team drive to store all our code, reports and project timeline updates. The overall project consisted of two broad components: the questions file and the java code. Clearly, the java code was the most extensive component and required more work. We split the java code into smaller pieces and divided the work amongst ourselves. We had two people, Divya and Parth, work on the incorporating and designing the GUI of the application. On the other hand, Raja and Kavya worked on the backend, which required creating endpoints that kept track of score and kept track of player when alternating. The bridge between the GUI and the backend was the "Action Listening" component that was attached to all the buttons. Since, there were a lot of buttons (in the frontend), all four of us worked together to configure the action listener handlers. For the last component, the questions file, we divided that evenly. Each of us had to come with 7 questions, related to computer security, to put on the jeopardy game.

### **Instructions to Run Game:**

- 1. <a href="https://github.com/raja-akula97/security-jeopardy">https://github.com/raja-akula97/security-jeopardy</a>
- 2. Git clone the repository
  - a. git clone https://github.com/raja-akula97/security-jeopardy.git
- 3. CD (or step into) the clone repository directory
- 4. Run 'java -jar securityGame.jar' to start playing

#### Works Cited

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- Matt, Seun. "How to Build a Desktop Application with Java." *Medium*, Prodsters, 15 May 2017, medium.com/prodsters/how-to-build-a-desktop-application-with-java-a34ee9c18ee3.
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