

## Final Project Report – PDF in submission repo – 40 Points

### 1. Name of project and names of all team members

- Title: Omnipotent
- Team members: Thomas Collins

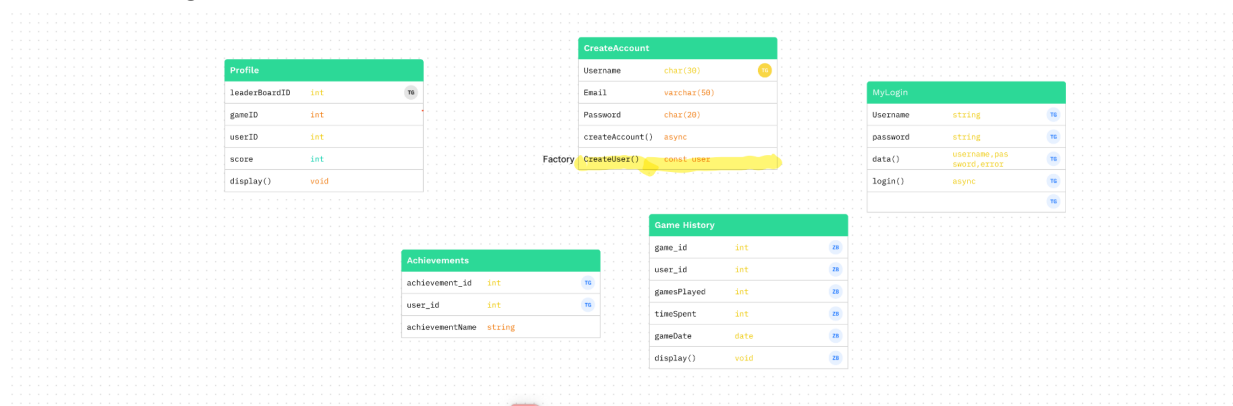
### 2. Final State of System Statement

- Creating account, Logging in, and playing minigames were all implemented
- Achievements and Profile were created but never elaborated upon to track and update player progression
- Since I worked alone on this project, it helped to have one single vision and understanding on how to implement it. Thus, I am very pleased with the amount of features that were correctly implemented and I know that the profile and achievement features are very easy to add on once this project is done
- I wanted to focus on correctly implementing patterns for achievements, user, scramble, and tile matching components

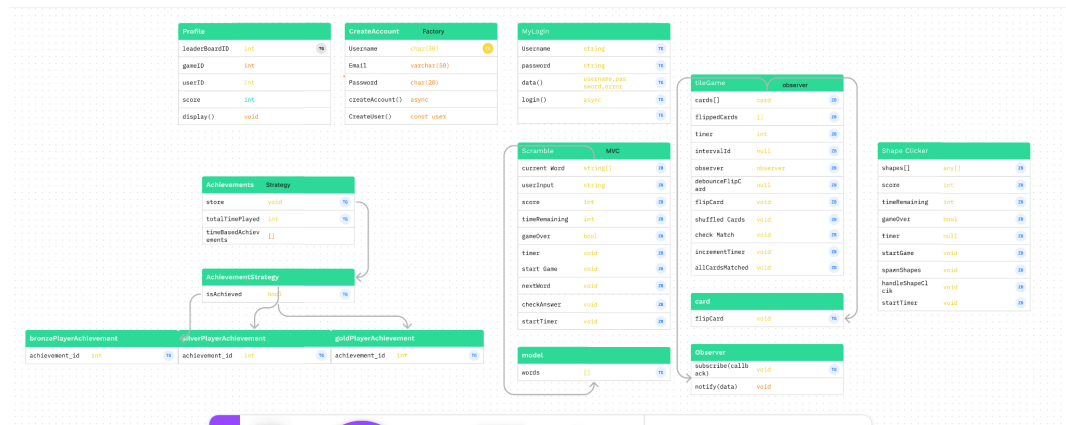
### 3. Final Class Diagram and Comparison Statement

- A thorough UML class diagram representing your final set of classes and key relationships of the system
- Highlight and document in that diagram any patterns that were included (in whole or part) in your design
- Include the class diagram submitted in Project 5, and use it to show what changed in your system from that point into the final submission
- Since projects 5 and 6, I implemented the strategy, factory, VMC, and observer patterns as shown in the UML diagram
- I did change leaderboards to instead be a profile component since leaderboards was my stretch goal

#### - Old Diagram



#### - New updated UML diagram



#### 4. Third-Party code vs. Original code Statement

- I used vue as my front-end framework which made creating the UI much easier
- I also used vuex to temporarily store data
- Axios, NodeJS, and ExpressJS for my backend services
- I used Arcade Classics's font library
- Used Postgres to store user accounts

#### 5. Statement on the OOAD process for your overall Semester Project

- I really enjoyed using Vue 3.0 since I had only used Vue 2.0 for a previous project and it was interesting seeing the slight changes they had made such as using vuex to store data
  - While it made it difficult to troubleshoot at times, it certainly helped develop my programming skills
- The strategy pattern for achievements made the most sense and it helped to visually see why this pattern is so helpful
  - since the achievements were time based so the variance came from the seconds to qualify for bronze, silver, and gold
- If I were to elaborate upon scramble, I can see why the separation between model view controller is so important as the data continues to grow
  - Ideally, I wanted to use a word generator api but that was not feasible with my time constraint

#### Demonstration – Recorded demonstration video – 30 Points

- The recorded video should be brief, 10 to 15 minutes; all team members should participate. Zoom is an effective way of sharing a screen for your application and allowing the team to comment on the work while recording to an MP4 file. Include the recording in your repo or provide an external link for viewing.
- Sections for the recording:
  - Introduce all team members.
  - Discuss (generally) who was responsible for which elements of the submission.
  - Demonstrate your final application, identify the technologies used and the primary functions.
  - Reflect on anything that did not go as planned or that you would do differently.
  - You will be assessed

during the demo video on the quality of the project delivery and on your demonstrated understanding of your project.

### Grading Rubric

Your team's project will be **due on Wednesday, 12/13 at 11:59 PM**. Assignments will be accepted late for four days with a penalty of 5% for each day late. After 4 days, assignments will be given a 0 and not be graded. Submissions will not be accepted after **Sunday, 12/17, at 11:59 PM**.

The point breakdown of this assignment is as follows:

Section	Points Comments
Final Report PDF	40 PDF in Repo: 5 sections with initial/final UML Class Diagrams
Code Submission	30 Repo with Code and README
Demonstration	30 Recorded video submitted in Repo (or via an accessible link)
<b>Total</b>	100