COMP-302 TERM PROJECT WEEK-7 AGENDA

Group Name: Brogrammers
Date: 09.12.2021

Issues solved:

- ❖ We have decided which alternative we are going to choose. We decided to choose the first alternative (Random Adversary Option).
- ❖ We have updated the UML package diagram. (We added the ymir package.)
- ❖ We have updated the UML class diagram. (We added Ymir class.)
- ❖ We wrote a use case for phase 2.
- ❖ Since we did not have much to do about R2/M2/D2, during the week we continued to work on code. We improved our code as follows:
  - ➢ We have finished moving the obstacles by dragging the mouse (by making sure the obstacles dragged do not collide with the other obstacles.)
  - ➢ We added gift box dropping from the gift obstacle and handled its collision with the phantasm.
  - ➢ We have added the game reset conditions (making phantasm do not move after game finishes). There are small bugs in loading game which we are working on. However, we are very close to finish loading the game without any bugs.
  - ➢ We have improved the movement of noble phantasm for various situations while playing the game.
  - ➢ We have completely finished the implementation of CreateWorldPanel (Note: When we first add obstacles with mouse clicks and then the system creates obstacles randomly, there are some collisions between these obstacles. We need to handle this problem.).
  - ➢ We have started applying observer pattern for updating the score in the game.
  - ➢ We started to implement Ymir Class, the initialization of the non destructible objects.
  - ➢ We debugged some problems in the saving, loading, and customizing functionalities.
  - ➢ We have implemented the adapter pattern and singleton pattern for saving the game. Adapter pattern chooses whether to save the game to the txt file or to the database.

Issues which are not solved:

- ❖ We have not finished adding use cases for phase 2.
- ❖ We have not added sequence diagrams for phase 2.

❖ We have not implemented the movement of the obstacles yet.
❖ We have not implemented the rotation of noble phantasm with keys yet.
❖ We have not added magical abilities to the game yet. The gift box is falling from the obstacle but it has not any effect in terms of magical ability earning.
❖ Ymir class is not fully implemented, but we have started, we will decide on the implementation and the strategies that we will use.

Our plan for the next week:

■ A plan for the next week, with specific actions and goals for each team member:

❖ We will continue on coding Ymir class; the magical abilities and the usage.
❖ We plan to finish everything we mentioned above (in the "issues which are not solved" part). Then, we will continue the requirement analysis, modeling and design for Phase 2.
❖ We will discuss and apply possible changes in the use cases, domain model, SSDs, class diagrams, non-functional requirements (such as Supplementary Specification) , system sequence diagrams, interaction diagrams, operation contracts, UML use case diagrams, UML package diagram, and UML class diagram.
❖ We are planning to use state pattern for the current state of the game; in particular, GAME_CONTINUES and GAME_OVER. We actually have this in the Observer, but we will explicitly do it for the state pattern, mixing it with the observer.

■ Issues you would like clarified by the TA and/or the instructor:

1. How can we write a proper use case including Ymir?
2. Does adding Ymir with (by choosing the first alternative) require many changes in R1/M1/D1? (We think it does not.)

As we continue working on the project, we will ask our questions to our TA via Slack.