

## CS3365 – Team Project: Phase 2

Due December 4<sup>th</sup>, 2023, before 11:59 PM

Phase 2 of the project is based on the “Lottery Purchase System (LPS)” description given in Phase 1. After reading that description again, complete the following tasks with your team members.

1. (25 points) Develop a **class diagram** for the “Lottery Purchase System (LPS)”. Some of you may have plans to develop this software without using classes. However, in a real-world project, you may have to develop this using various classes so that each user can have his/her own instance/object in the system. (In a real-world situation, your system will be accessed by many at once). Even if you develop this project without using classes, imagine that you will develop this program using classes and come up with a class diagram.

2. (25 points) State diagrams can describe a single object and illustrate how that object behaves in response to a series of events in your system. Choose the two most active objects from your system and draw two separate state diagrams for them. (Similar to the exercises we did in class).

Name of the first object: \_\_\_\_\_

- Draw the first state diagram.

Name of the second object: \_\_\_\_\_

- Draw the second state diagram.

3. (45 points) Develop a **working program** for the description given in phase 1. Please note that this is a team project and you do not have to develop this program by yourself. Once you are done developing this program, create a video describing each functionality of the software. This is part of the project presentation, and each member of your team needs to participate in the presentation.

In this program, you need to show each functionality implemented. For example, a user browsing and purchasing a lottery ticket. Once the user logs out and logs back in, the user needs to be able to see all the tickets he/she has purchased previously. Etc.

When submitting phase 2 of this project, you will have to submit the code that you have written along with a video describing how to operate your program.

4. (5 points) During your design and development of the project, consider possible local and global impacts of the project on individuals, organizations, and society. (We will talk about this topic in a future lecture). Once you analyze these impacts, describe your thoughts.

5. (Required) Indicate work done by each team member. All team members must do an equal amount of work and support other members in order to develop a successful project. (Meaning, if

you see something wrong with a section developed by another team member, you should work together to fix it).

**Simon Swopes**

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**Work done: Screen Designer, Component Developer, Navigation Designer, admin functions, Ticket generation.**

**Rory Campbell**

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**Work done: Data Base System Design, Winner Validation User profiles, Login Validation.**

**Tyler Kuchta**

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**Work done: State Diagram, Cashout Functionality, User payment validation.**

**Samuel Riggan**

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**Work done: Confirmation Numbers, Quick Pick Designer, Class Diagram.**

More information about the submission will be given four days prior to the due date. Whenever you have a question about the project, please bring that to the class or during office hours (rather than asking through emails).