syst 17796 Deliverable 1

design document template

Overview

## Project Background and Description

***Describe the project goals and final vision. Include a brief description of how to play the game you have chosen and a reference to the rules of the game you have chosen.***

***Also describe the current starting base code. Use technical terms to describe the code including what language it is written in, any patterns you can see, and any coding conventions used.***

The Project initiated to create a version of the card game called Go-fish. The goal of the project is the emulation of most of the game rules. The objective is to have the players play the program and feel it is as close to the real game and edit out all bugs as much as possible, to have a near perfect experience of Go-fish is the final vision of this endeavor.

To Win at Go-fish the player gets a set of four matching cards, they must lay down the matched set immediately in full view of the other players.

The Card game Go-fish is played by multiple players, the regular size of 52 cards deck is categorized into 4 differing suits: (clubs, diamonds, hearts, spades). Each suit has a ranking system, the ranks are as follows ace, two, three, four, five, six, seven, eight, nine, ten, Jack, Queen, and King.

***The current starting base code.***

The current base code has the following classes Cards, PlayingCard and finally Player.

Card is an abstract class which may contain methods and fields for the specific child classes.

PlayingCard class extends the abstract Card class.

Player class will be used to make a constructor that sets a unique id to the player after receiving the player credentials.

## Project Scope

***Describe the names and roles of each team member. Describe the technical scope of the project by talking about the interface and how you will know when the project is complete.***

Our team, group 3 consists of four members, in the first phase Meet is tasked with handling the setting up the GitHub repository and ensuring the rest of team has access and are added as collaborators. Sojal is taken to the creation of the UML diagram assisted by the inputs and discussions of the rest of the group. Sukan is tasked with completion of the team contracts by all team members and design document and all parts that entail. The team leader Jashanpreet will be leading the project and is shoulder most of the work when it comes to the logic of the initial base code .

The project is divided in to four phase:

In the first phase requirements and responsibilities are determined. To ensure the group members with their unique skills and knowledge have the appropriate tasks assigned to them a schedule is made to plan and accommodate the duration needed for each taskmeet the current milestone withing the given deadline.

The project’s completion should be attained be Deliverable 3 and so the initial idea of the project’s completion is that if a player can finish their rounds as many times as they desire without any exception’s errors thrown by the program or from the game’s logic or code .

## High-Level Requirements

|  |  |
| --- | --- |
|  | [Describe the high level requirements for the project. For example:] |

* Ability for each player to register with the game.
* Ability for the game to communicate a win or loss.
* Ability for players to know their status (score) at all times.
* Ability to draw more cards by player
* Ability to play another round of the game.

## Implementation Plan

**Include your Git repository URL here :**

<https://github.com/radadime/CourseProject.git>

**brief description of the expected use (i.e., each developer checks in code at the end of each day/week).**

Each completed milestone will be achieved by using GITHUB, where team members can access and contribute their assigned parts to the project to update the base code. GitHub’s version control will help patch any bugs as each member updates the code to seamless put all the parts together.

Version control documents are also going to be saved and used by developers/ group members to check in on each version of the code and with the specified updates to the code at every milestone and deadline. Word files used are stored to save the team contract, and the Design document in the own separate folder/directory. The team will also be using Visual Paradigm and NetBeans IDE to complete the current phase of this project’s deliverable.

## Design Considerations

Talk about how the current code is structured as it relates to the following OO principles.

Each principle should have 2 or 3 specific examples from the base code or your intended additional code (i.e. potential for improvement).

Card abstract class is used to promote *loose coupling* to ensure details of implementation are encapsulated and hidden from the whichever users of the class.

Player class will utilize the delegation principle to call to methods from PlayingCard class, this ensure future flexibility and will be easier on maintenance of the code .

PlayingCard class has private modifiers on both Rank and Suit to encapsulate the fields.