Design Document - Group036

Group Member :
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York Chen, Yuezheuxan Zhu, Ziqian Gao

Group Members’ Contributions

Jialun Chen - Write docstring for Entity and Usecase & Write Body Part of LogIn & Write test for DeckManager

Wise Chua - change command line to GUI & implement updates of GUI for each played hand & Implement Readfile class for reading card file.

Xinyuan Wang - PVE mode realization, check and fix SOLID and clean architecture, test for readfile, uml diagram.

Yao Zhou - GUI design and implementation, construct the UI class and modifies Controller Class

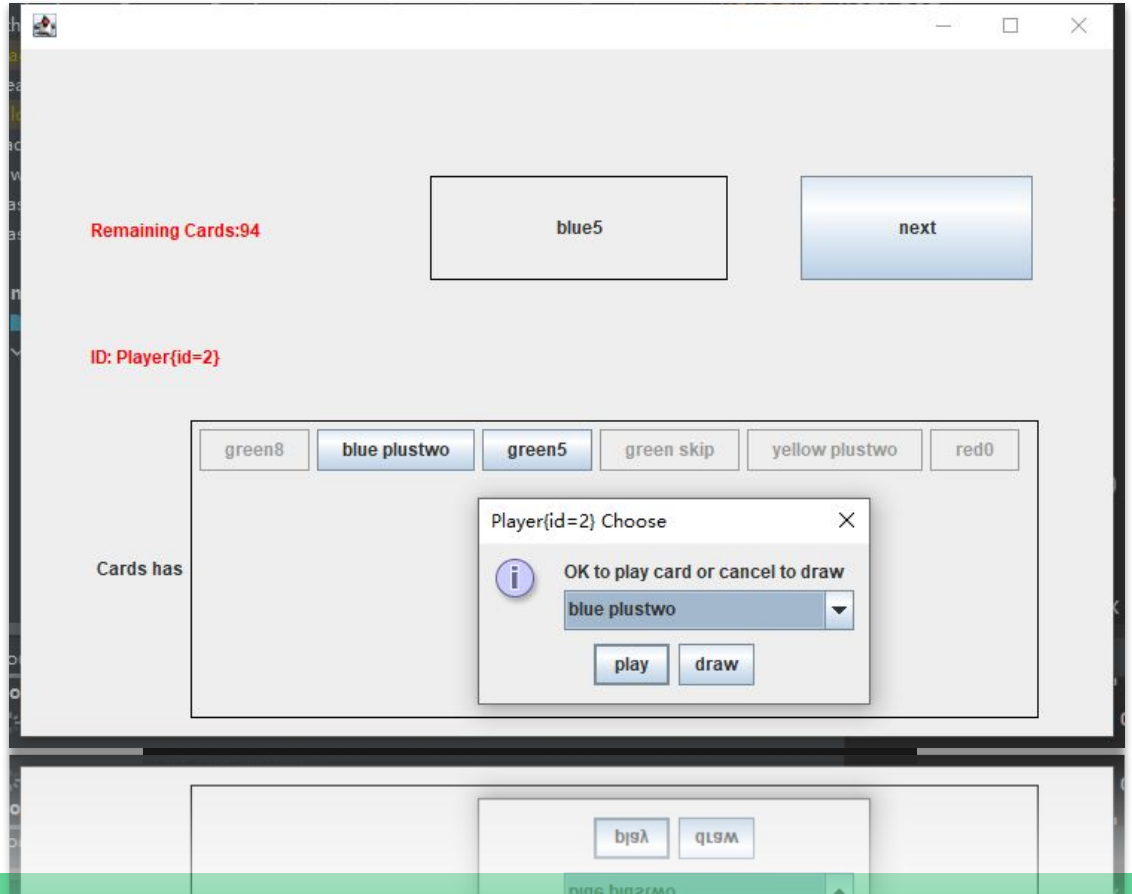
York Chen - Logom System interact with file & Test for Entity & refactoring & code style

Yuezhexuan Zhu - resturcutre the controller & write test for PlayerManager and Player & debugging works

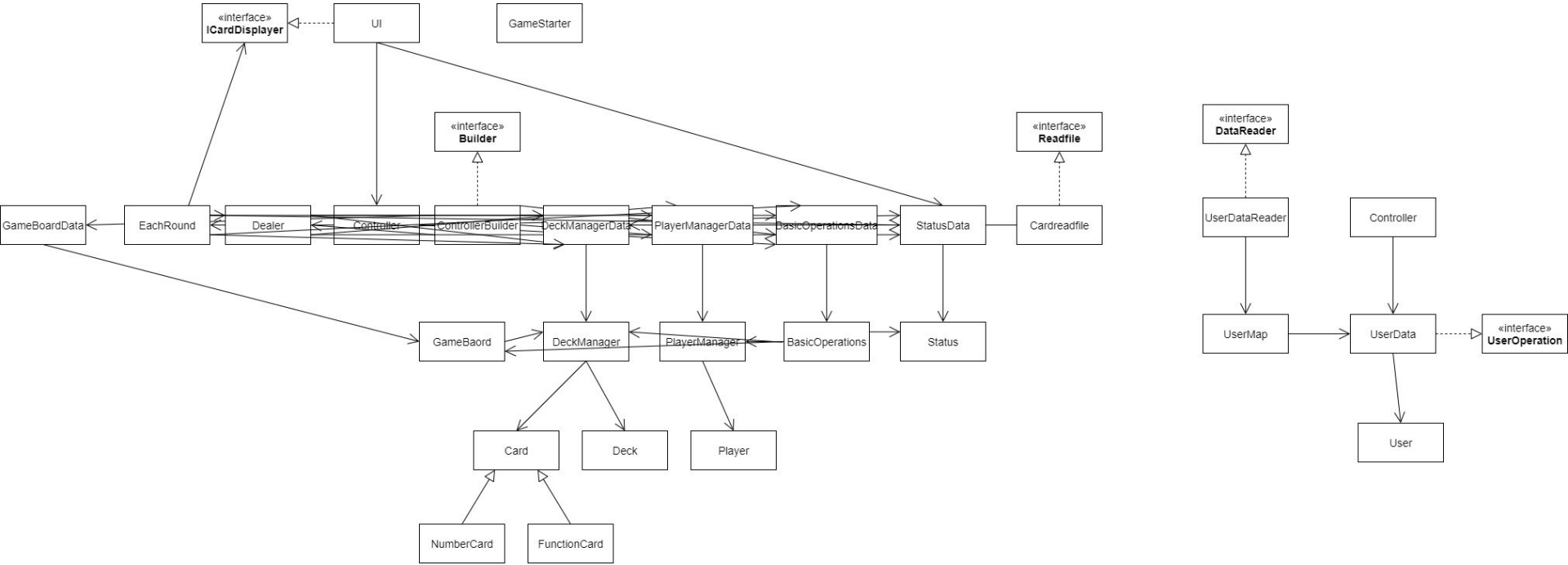
Ziqian Gao - write card test classes, modifies the PVE block, GUI design

Project Specification

- Aspect of Basic Setting
- Aspect of design pattern
- Aspect of GUI



UML


«interface»
ICardDisplayer
UI
GameStarter
«interface»
Builder
«interface»
Readfile
«interface»
DataReader
GameBoardData
EachRound
Dealer
Controller
ControllerBuilder
DeckManagerData
PlayerManagerData
BasicOperationsData
StatusData
Cardreadfile
UserDataReader
Controller
GameBaord
DeckManager
PlayerManager
BasicOperations
Status
UserMap
UserData
«interface»
UserOperation
Card
Deck
Player
User
NumberCard
FunctionCard

Major Design Decisions:

- Reduce the size of controller
- Choice of Log in System
- Add function card
- The UI
- Design Pattern

how your project adheres to Clean Architecture

- clearly seperate classes into four layers
- follow layer-by-layer rule
- dependency injection pattern

how your project is consistent with the SOLID

- Login
- UI
- main

which packaging strategies you considered

Login --Layers strategy

Uno--Layers strategy

Design Patterns

Implemented:

- Player Class - Iterator
- Controller Class - Builder
- Dependency Injection - UI

Thinking to implement:

- Strategy Pattern for Additional Computer Game Mode
- Facade for our code to ensure SOLID principle

Other Methods:

- Serialization for our login user information

progress report

- open questions your group is struggling with (questions to TA)
- what has worked well so far with your design (reflection)
- **a summary of what each group member has been working on and plans to work on next**
- **Future TODO**