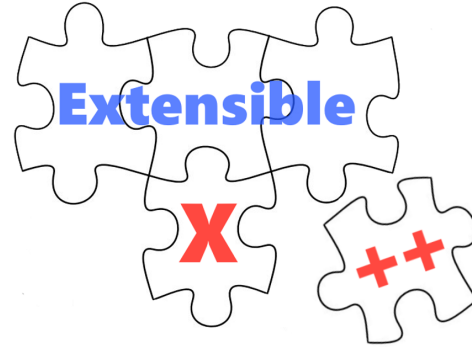# Pac-Man Quicksilver Ver

Bill Huang, Yang Zhou, Zhen Gao,

Jeff Zhou, Jianing Lou, Jerry Zhang, Zhengtong Liu

Design Problems

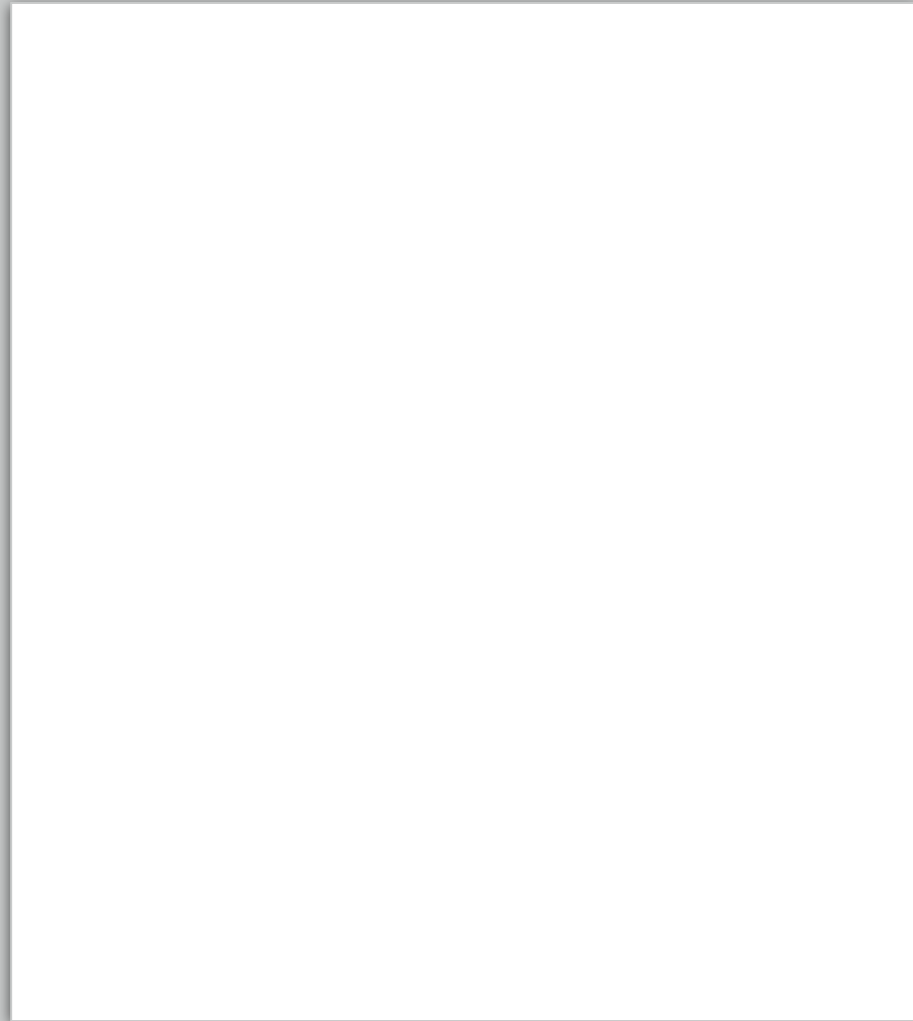- How to make use of our team name?

- How to make the game extensible?

App Design

Board

- Interface IPacmanBoard

Objects

- Interface IObject
- Class Ghost
- Class Pacman
- Abstract Class AConsumableObject
  - Class Dots
  - Class Fruit
  - Class Quicksilver Charm

Use case: Frontend

1. Starts the game
2. Gets the most up-to-date board
3. Resets the game
4. Change Pac-Man's direction
5. Set number of ghosts
6. Initialize the game board

Use cases: Backend

1. Return current board state to frontend
2. Reset the board state to default
3. Start the game by invoking the board to updates
4. Set number of ghosts on a board
5. Change direction of Pac-Man
6. Initialize the game board and create necessary objects

Design Patterns

1. Strategy Design Pattern

2. Command Design Pattern

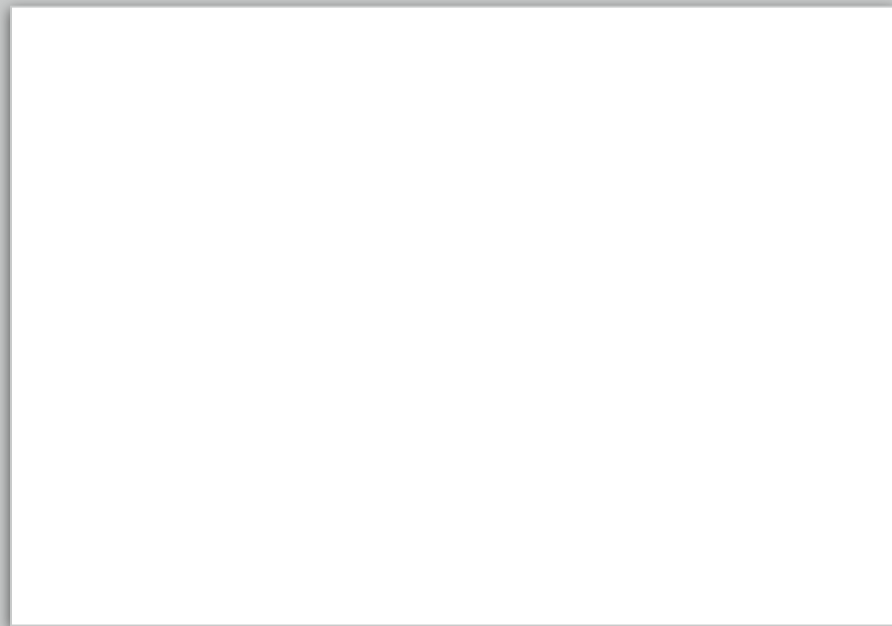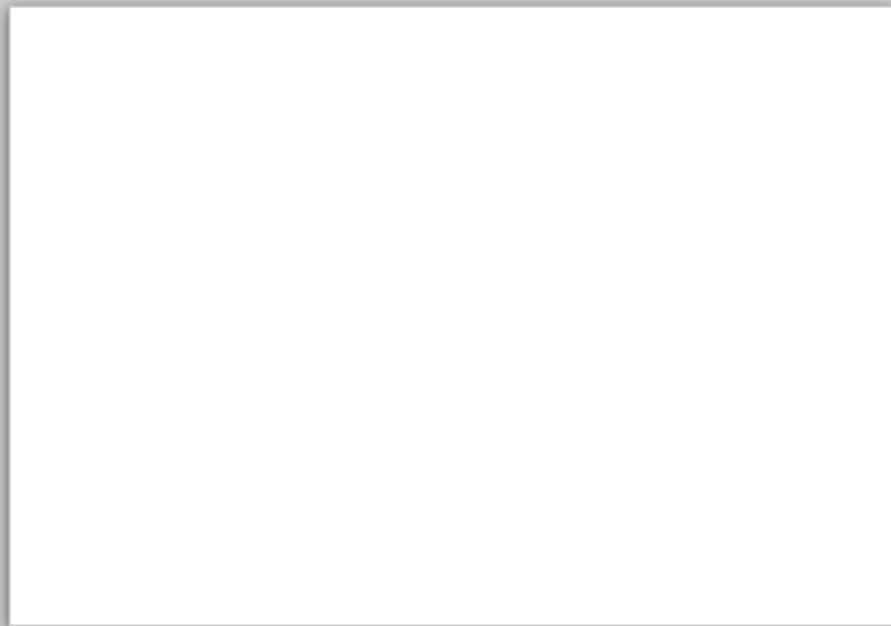3. Factory Design Pattern

4. Singleton Design Pattern

1. Strategy Design Pattern

2. Command Design Pattern

3. Factory Design Pattern 🏭

4.Singleton Design Pattern

Demo

Q&A

Thanks for listening !