

Plan of Attack

Classes Breakdown:

We plan to implement the game with module-view-controller pattern

Classes	Description
Player	Implement players on the gameboard
Cell	<p>An abstract super class to Implement cells on the game board</p> <p>Subclasses include:</p> <ul style="list-style-type: none">- OSAP- tuition- DCTimeline- GoToTims- Coop- GooseNesting- SLC- NeedlesHall- Roll up the Rim Cup <p>Cell also includes another abstract super class called Property which includes subclasses of</p> <ul style="list-style-type: none">- AcademicBuilding- Residence- Gym
Gameboard	Implement a 2-dimensional gameboard with 40 cells
Display	Display the gameboard on screen

Timeline:

Date	Member	Task
July 11-15	All	<ul style="list-style-type: none">- Brainstorm all the classes needed and relationship between each class.- Listing all the design pattern and discuss the feasibility of each one- Discuss the necessary methods and fields for each class- Draw UML to make the relationship clearer- Answer all questions- Assign work to each team member
July 16	w69xu	Player
	s2ran	Gameboard
	w23ding	Display
July 17-19	w69xu	<ul style="list-style-type: none">- SLC- NeedlesHall- Roll Up the Rim Cup
	s2ran	Property
	w23ding	<ul style="list-style-type: none">- OSAP- tuition- DCTimeline- GoToTims- Coop- GooseNesting
July 20-21	All	<ul style="list-style-type: none">- combine parts implemented by each member and implement main function- debug program and testing
July 22	All	Final testing and presentation

Questions:

1. After reading this subsection, would the Observer Pattern be a good pattern to use when implementing a Gameboard? Why or why not?

A: Yes it would be a good pattern to use. Gameboard can act as the subject in the observer pattern and cells are the observers. Whenever there is a player makes a movement or an action, the cells will receive updates and call methods to make changes on the board.

2. Suppose that we wanted to model SLC and Needles Hall more closely to Chance and Community Chest cards. Is there a suitable design pattern you could use? How would you use it?

A: Factory method would be suitable. Because SLC and Needles Hall use different random number generator. It would be very useful to have SLC and Needles Hall derived from a super class which has a method to generate random member. SLC and Needles Hall can then implement the method differently on their own.

3. Is the Decorator Pattern a good pattern to use when implementing Improvements? Why or why not?

A: Yes. Because improvements are extra features added to normal cells. Improvements are like ingredients and cells are like basic pizzas.