Group 5

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Snakes & Ladders

For our project we ended up with a game of Snakes and Ladders. During the beginning of the project, we were following a Big Bang Model. Our fist Idea was to have a card game that simulated a race to the finish, where the players would place cards that would either move the player forward or in some way interact with an opposing player. Concepts were created of all the types of cards. Some code was developed for the different cards and how the board lay out would be set up. We hit a problem when coding the view and player interactions with the cards. We also found it hard to implement a computer player. Since we were following a Big Bang Model, we were able to scrap the first idea, and keep some aspects of the game model and code. We tweaked and reshaped the code to be able to fit our new idea. From there we decided to go for a more Spiral Model approach where we would go through building and testing.

Since we had code from the previous idea, we redesigned the board layout from a one dimensional grid to a 2D grid but still kept the idea of a race between players. With the design of cards, we turned them to the idea of having snakes and ladders that would influence how the player would go through the board instead. The snakes and ladders each have a starting value and an end destination value. They work when a player would land on the starting location and end up at the designated end location. With a dice mechanic instead of a card implementation coding for the computer was much easier, since all the computer player must do is roll the dice after the player. This makes game analysis much easier to handle. During late development minor changes were made for easier identification of which ladders and snakes are connected since the game has a simplistic design. This was achieved after sample testing different possible model views.

In conclusion it was possible to create this game because we used the Big Bang model and then when a concrete idea and concept was agreed on a more stable and reliable Spiral model being implemented later. We were able to smoothly transition between testing, design, and evaluation.