I changed my design on the representation of the board and tile. I planned to use 144*144 integer array to represent the board and also use integer array to describe the segments on a tile. When I implemented the system, I realized that this way is too bulky and takes too much memory. Thus, in the last stage, I decided to use HashMap<Coordinate, Tile> to represent the board and define a Component class to represent the segments on a tile.

Besides, I thought the players should have a list of meeples so that they can check the position and status of their meeples. Then I found this attribute is unnecessary because meeples should be associated with tiles and scoring. The only association should be the owner of meeples which can be represented by having an instance in Meeple class.