Description of Design

This document corresponds to the changes mentioned in the discussion.pdf.

1. I find that it probably makes more sense for feature to be responsible for checking if itself is complete and compute the score it has. These methods are implemented differently in the feature subclasses: road, city and monastery due to their different approaches of checking if they are complete and computing their scores. In general, I think it is a good place to use the template design pattern because road feature, city feature and monastery feature all have strong relationships with the abstract parent feature class.

2. I think meeple class does not have too many contents to implement. Instead, because it is relatively simple, it may be more suitable to let it become a field of the player class, which keeps track of how many meeples a player has at the moment.

3. For checking the connectedness of tiles, the field segment is an essential part.

4. PostionOnBoard class is used to represent the tile's position on the board. PositionedBorder class is used to keep track of a border's direction, segment type and its position on board.

5. Because of the above design changes, certain methods and fields within the GameManager class, Tile class and Feature class are adjusted including being added, being deleted and being moved to another place.