## **Implementation Report**

Overall, the majority of the required implementation has been completed. However, there are a few areas that were simplified or omitted in order to focus on the main features that needed to be implemented during this phase.

## The Map

As described by requirement REQ-7.6, each player should get exactly five sectors at the start of a game. However, in the current implementation, each sector is randomly assigned to players. The feature is implemented in the method *assignSectorsToPlayers* in *MapClass.cs*.

## Conflict Resolution Mechanism

This part has been fully implemented.

## Gang Member Allocation

- Bonus gang members for capturing all the sectors of a college.
  - As described in requirement REQ-1.1.
  - Since every player is an instance of *PlayerClass*, bonus gang members can be added using one of the setters:
    - playerInstance.GangMembers += number of bonus gang members;
  - This bonus should be added just after the attack phase, thus the feature is implemented in the method *makeMove* in *Sector.cs*
- Ability to allocate gang members at the start of each turn instead of just at the start of a game.
  - o As described in requirements 1.1, 1.2, 1.3 and the game activity diagram in Arch1.pdf
  - o The feature is implemented in the method *changeTurn* in *GameClass.cs*.