Iteration Plan Week 1

Our plan is to construct the design of use case 3, which can be seen in the architecture file attached. We will aim to do this by exploring the scenarios of this use case with a domain model, sequence diagrams, arrangement of necessary classes into modules, and a class diagram.

We will not aim for a full implementation of use case 3, as this is the most complicated part of our software. Instead, we implement the following parts of use case 3. Our aim is to have the system function as follows:

- System receives course number and maximum number of students per group as input (maybe stored).
- System retrieves list of students (will be stored as text file where each line contains a student name and student number separated by comma) we will use dummy data for this.
- System calculates number of students in class from text file of students
- System calculates number of groups and size of each groups
- System creates empty groups
- System fills empty groups with students at random
- Professor is able to view finalized groups and move students from one group to another

We chose this as our first iteration as we believe this would create the most significant reduction in risk. This is because use case 3 covers the essential feature of our software, creating the groups of students. As well, this implementation will supply us with executable architecture which we will be able to show to the customer.