

# Iteration Plan

## Iteration 2

05/04/2020



## Iteration 1 reflection:

During iteration 1, we made couple of decisions that we haven't initially planned in our iteration 1 plan, those decisions were:

### 1. Completely removed one-way roads:

**Reason:** One-way roads are counter-productive to the application.

Since the goal of the application is to reduce the traffic jams in real life, and upon looking into how real-world traffic work, We came to realize that one way roads would only reduce traffic if the destination of the car moving was clear (Get from point A to B the fastest way possible).

Since cars move randomly in our application, one way roads will only create bottlenecks, because cars will randomly choose to take the one way roads, and might have to wait for other cars to enter first.

**Expected effect:** To Reduce traffic jams during the simulation.

### 2. Moved two-ways roads from must to should (And from iteration 1 to iteration 2):

**Reason:** We prioritized intersections instead.

Upon researching real-life traffic, we came to realize that intersections are the most important piece of road to implement, because it's where most of the traffic issues (that our application is trying to tackle) are born (traffic jam, accidents...).

Therefore we decided to have intersections to be the first road option in our application.

A city that has 2-way roads that do not intersect is not realistic, and wouldn't serve the purpose of our application (Simulating real-life traffic).

In the second iteration, after adding intersections, we can add two-way roads that can possibly connect (and elongate) to any of the intersection roads. We plan to use two-way roads to extend the distance between 2 intersections, and see how that affects traffic.

It is possible that if we have more time during iteration 1 that we implement two-way roads in iteration 1 anyway, but as for now, two-way roads belong in iteration 2.

**Expected effect:** More time to perfect intersections, leading to the application

delivered at the end of iteration 1 to be more realistic, and closer to the end goal (Reducing traffic issues in real life) , because intersections capture most of these issues.

As far as the rest of iteration 1 plan goes, nothing is changed. Everything is going according to plan.

## **Iteration 2**

### **Scrum Activities:**

- Planning: Include tasks that are already planned for the second iteration which can be seen below in section **Activities and Tasks**
- Daily Scrum: Update the progress of each task per week in a time-boxed meeting
- Review: Show our progress and deliverables of iteration 2
- Retrospect: Have a time-boxed meeting where the team should evaluate and give feedback from the second iteration
- Refinement: Have time-boxed meeting during iteration 2 to define tasks for the completion of the application

### **Activities and Tasks**

- Designing software and implement the set-up of application with a set of functionalities as written in the project plan on the second iteration
- Testing the software method of the code of each set
- Documenting and creating reports
- Update design document
- Update work division report
- Plan activities, tasks, and deliverables for the next iteration

### **Planned Deliverables**

1. The final version of URS
2. Design document
3. Plan for iteration 3
4. Source code of the prototype
5. Unit tests of prototype
6. Prototype
7. Work division report