

## Weekly Progress Report

COMPANY NAME: TechBatch

TEAM MEMBERS: Eda ÖZKAYNAR, Hasan Said ÜNAL, Mustafa ÇELİK, Mustafa Kemal ÖZDEMİR, Tuana MERDOL

### **What were your plans and goals for this week? What was the individual task of each member of your team?**

This week, our main objective was finalizing our setup for the test demo. Also, we needed to update our test documents according to feedback. We determined three main tasks for our project and each member worked on these three parts from time to time. These three main tasks, which are related to test parts for our demo, are IR communication range setup, driving the car (mobile unit) in a certain path, and creating the physical setup for our test environment. We encountered multiple problems, however we solved those problems. Moreover, we needed to update our test procedures according to the new solutions we had provided.

### **Have you met your goals?**

We met our goals despite the 2 main problems we had encountered. Luckily, we had finalized the setup for our demo and updated our test documents.

### **What were the challenges that you encountered?**

We encountered two main challenges while we were implementing the project. Firstly, since the IR transmitters and receivers in the market have longer communication ranges than we need, we had needed to decrease the range. Last week, we had decided to decrease that range with physical methods, however we realize that this method provides unstable results, i.e. range can vary in different conditions. Thus we propose a software solution for this problem and also we had some problems with the IR communication procedures. The second problem that we encountered was about driving the car. Since the DC motors of the robot car never provide the same speeds, we could not drive the car straight or turn exactly 90 degrees. We had bought a gyroscope module before as we had foreseen this problem, however we had some problems while we were implementing the movement algorithm with gyroscope data.

### **What are the questions (if any) that you would like to discuss this week?**

We do not have any questions right now.

### **What are your plans and goals for next week? Assign tasks to each individual member.**

Next week, hopefully, we will finish are setup with the final touches and we will perform our demo on Wednesday at 6 pm. Until Wednesday we will deal with final adjustments and improvements. After Wednesday, we will start writing our conceptual design report. The report was divided into parts and assigned to each group member. Individual assignments are provided below:

- Eda ÖZKAYNAR is assigned to write “Problem Statement” and “Objectives and Requirements” parts.
- Hasan Said ÜNAL is assigned to write the “ Sub-system-2” part.
- Mustafa ÇELİK is assigned to write the “ Sub-system-1” part.

- Mustafa Kemal ÖZDEMİR is assigned to write “Executive Summary”, “Introduction”, “Motivation of the project”, “Current status of your project work”, “Scope and organization (of the report)” parts.
- Tuana MERDOL is assigned to write the “Test Results”, “Planning”, “Schedule” , “Risk Analysis” , “Conclusion” parts.