

# Synthorganic

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2 - 26- 24 DESALES UNIVERSITY CS356

## **Team Synthorganic Sprint 1 Planning Document**

## 1 Sprint overview

#### 1.1 Overview

In this sprint, we will be focusing on creating a basic outline of the neural network, getting it ready to train on data received from the blender model.

#### 1.2 SCRUM MASTER

Mohammed Asad

#### 1.3 SCRUM MEETING TIMES

2/29 - 11:00-12:00 PM | 3/1 - 11:00-12:00 PM | 3/11 - 11:00-12:00 PM | 3/15 - 11:00-12:00 PM

#### 1.4 RISKS/CHALLENGES

Training the neural network and rendering the Blender model will take a lot of computational power that we are not sure we have.

## 2 CURRENT SPRINT DETAIL

#### 2.1 REQUIREMENT 1

The prosthetic leg system shall accurately detect the user's intention to walk and initiate the walking motion within 5 seconds.

#### 2.1.1 Tasks

Req: AI Outline

Task description	Estimated time	Owner
Create a basic outline of the Neural Network	2 hours	Harkiran
Connecting TensorFlow with Blender	1 hour	Lorenzo
Define and label all sensors data will be inputted from	1 hour	Mo

#### 2.1.2 Acceptance criteria

If this works correctly, we can test our other functional requirements based on this basic outline.

## 2.2 REQUIREMENT 2

The system shall maintain stability and balance throughout the walking motion, preventing any deviation from the intended straight-line path.

#### 2.2.1 Tasks

Req: Design 3D Model

Task description	Estimated time	Owner
Create a basic human model in blender	2 hours	Lorenzo
Label all key points on model leg (For	1 hour	Mo
positional data that we will input data from)		

#### 2.2.2 Acceptance criteria

If this works correctly, we should have an accurate model for which we can simulate walking.

## 2.3 REQUIREMENT 3

<You created a requirement based on a user story that were prioritized, for example: As a developer, I want to add a slider bar so that users will be able to view the calendar months easily>

#### 2.3.1 Tasks

<Each requirement has several tasks, pick the task and the estimate that will be implemented for this sprint>

Task description	Estimated time	Owner

## 2.3.2 Acceptance criteria

Example: if this user story is implemented successfully, a tester should be able to see a slider bar which changes the month on the calendar.