

ENGG1100

Professional Engineering

Semester 1 2023

**Project Plan**

Class: Team Name:

Project Leader Name: Tutor Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_­­­­\_\_\_\_\_\_\_\_\_

A group of people playing basketball

Description automatically generated with low confidence

# CONTENTS

[CONTENTS ii](#_Toc125200307)

[1 THE TEAM 1](#_Toc125200308)

[1.1 Team Members 1](#_Toc125200309)

[1.2 Team Roles (www.123test.com/team-roles-test ) 1](#_Toc125200310)

[1.3 Team Objectives 2](#_Toc125200311)

[1.4 Strengths 2](#_Toc125200312)

[1.5 Team Roles 2](#_Toc125200313)

[2 TEAM DYNAMICS 3](#_Toc125200314)

[2.1 Team Leader 3](#_Toc125200315)

[2.2 Chair for Meetings 3](#_Toc125200316)

[2.3 Minute Taker 3](#_Toc125200317)

[2.4 Meeting Time, Location, and Length 3](#_Toc125200318)

[2.5 Communication Methods / File Sharing and Storage 3](#_Toc125200319)

[2.6 Decision Making Procedure 3](#_Toc125200320)

[2.7 Poor Team Member Performance 3](#_Toc125200321)

[2.8 Conflict Resolution 3](#_Toc125200322)

[3 THE PROJECT 4](#_Toc125200323)

[3.1 Project Objectives 4](#_Toc125200324)

[3.2 Project Subsystems 4](#_Toc125200325)

[3.3 Project Outcomes 4](#_Toc125200326)

[4 TIMETABLE 5](#_Toc125200327)

[4.1 Team Member Availability 5](#_Toc125200328)

[4.2 Conflicting Deadlines 5](#_Toc125200329)

[5 PROJECT TASKS 6](#_Toc125200330)

[5.1 Major Milestones 6](#_Toc125200331)

[5.2 Tasks to Achieve Milestones 6](#_Toc125200332)

[5.3 Definitions for Task Success 7](#_Toc125200333)

[5.4 Gantt Chart 8](#_Toc125200334)

# THE TEAM

## Team Members

List your team members and their contact details.

|  |  |  |
| --- | --- | --- |
| **Name** | **Email** | **Mobile** |
| **Luke Cornel** | l.cornel@uqconnect.edu.au | 0401941057 |
| **Harry Swindle** | harryswindle@me.com | 0490805543 |
| **Tara Adhikari** | t.adhikari@uqconnect.edu.au | 0402505405 |
| **Lauren Taylor** | l.taylor6@uqconnect.edu.au | 0413859033 |
| **Jasper Xiao** | Xiangxin.xiao@uqconnect.edu.au | 0406161527 |
| **Sam Allpass** | s.allpass@uqconnect.edu.au | 0490803672 |
| **Marton** | m.temesvari@uqconnect.edu.au | 0492843974 |
| **Izzy Hurree** | i.hurree@uqconnect.edu.au | 0435993987 |

## Team Roles ([www.123test.com/team-roles-test](http://www.123test.com/team-roles-test) )

Each team member should take the test above (3 mins), then decide which roles best suit each person.

|  |  |  |
| --- | --- | --- |
| **Name** | **1st Preferred Team Role** | **2nd Preferred Team Role** |
| **Luke** | Drive |  |
| **Harry** | Control |  |
| **Tara** | Drive |  |
| **Lauren** | Structural |  |
| **Jasper** | Fluid |  |
| **Sam** | Control |  |
| **Marton** | Fluid |  |
| **Izzy** | Structural |  |

## Team Objectives

List the objectives you want to achieve as a team. All team members need to agree on this. What other outcomes does your team want to achieve?

The team objective we have come to is to create a simple yet effective unmanned fire truck whilst also demonstrating clear teamwork in areas including but not limited to an; equally shared workload, enjoyable experience, understanding and close working team.

## Strengths

In addition to the preferred team roles above, what are the individual strengths of team members? For example, one team member may have excellent drawing skills while another team member may have excellent writing skills.

|  |  |
| --- | --- |
| **Name** | **Skill** |
| **Luke** |  |
| **Harry** | Organisation |
| **Tara** | Good drawing skills |
| **Lauren** | Management and Coding |
| **Jasper** | Coding and modelling |
| **Sam** | Building and Public Speaking |
| **Izzy** | Report writing |
| **Marton** | Research |

## Team Roles

Are all the necessary roles covered? Where will the team need to devote extra energy? What will be the strategy for ensuring team success given the team make up?

Compatibility between subsections will need to be constantly ensured to ensure that the final truck will work.

Organisation of meeting times will be necessary to ensure enough collaborative time on the system. This goes without saying that team members who are away for particular meetings will need to be caught up on what was achieved and what is required of them.

Some team members have outlined that they get stressed about their progress without regular check-ups, and such this makes the regular meetings essential.

# TEAM DYNAMICS

## Team Leader

Who is your team leader and how did that person become team leader? Maybe you have a leader for each section of work or have decided to swap leadership in which case record that decision here.

Harry was nominated team leader as a result of his ability to work well with all members as well as his ability to organise the group work.

The role of team leader will be to ensure all sub-sections are on track for completion and that all members are feeling comfortable and not overworked. Should it come to it the role will also be to settle disputes as well as a person to come to with issues about compatibility with other sub-sections.

## Chair for Meetings

Who will chair meetings and how did that person become chair? Will you rotate this role?

For the first couple of meetings the chair will be a rotated role until it is found that someone is extremely confident and effective in the role.

The chair for the meetings will be in control of time keeping, ensuring that tasks from all sub-sections are completed within a recommended time and that meetings don’t turn into a couple hour hang out.

## Minute Taker

Who will record the facts, conclusions, and actions as they occur in team meetings? Will you rotate this role?

Similar to the chair, the first couple of meetings the minute taker will be a rotated role until it is found that someone is extremely confident and effective in the role.

The role will consist of taking down key points outlined in the meetings to identify where the sub-sections are up to in construction. They will be in charge of reminding team members of what was said and what needs to be completed.

## Meeting Time, Location, and Length

When and where will you try to hold team meetings and how long will these meetings be?

Locations: Libraries, College study halls

Time: During afternoons

Length: 2-3 hours

## Communication Methods / File Sharing and Storage

How will your team stay in touch outside of meetings?

Facebook messenger, google documents, teams and Email

## Decision Making Procedure

How will your team make key decisions? Will you have a formal procedure?

Small decisions can be made on behalf of the people it most affects but for the problems that affect multiple sub-sections a vote will be held to decide. In the case of a 50-50 split, the team leader will have the final say.

## Poor Team Member Performance

How will you handle poor performance for example, in terms of meeting attendance, standard of work, or missed deadlines?

Poor performance from a team member will be treated fairly. The member will be asked if they need help and if there is a reason for them falling behind. People within the same sub-section will be the first to approach the team member but if it is an issue within all sections, it will be the role of the team leader. Our group is extremely easy going and issues are going to be rare, but in the case that there is one, forgiveness, assistance and empathy are essential.

## Conflict Resolution

What is your strategy to deal with conflict in your team?

As stated above.

# THE PROJECT

## Project Objectives

List the objectives of your project and use SMART as a guide in defining your objectives: https://[www.mindtools.com/pages/article/smart-goals.htm](http://www.mindtools.com/pages/article/smart-goals.htm)

**S – Specific (the objective only conjures one impression in your mind)**

**M – Measurable (you can determine how much of the objective is accomplished) A – Attainable (this objective is not impossible)**

**R – Relevant (this objective is important to the success of your project) T – Time bound (this objective must be satisfied by a known time)**

## Project Subsystems

Who will develop the Concept Report for each subsystem?

|  |  |  |
| --- | --- | --- |
| **Subsystem** | **Team Member** | **Team Member** |
| Structural | Lauren | Izzy |
| Drive | Tara | Luke |
| Control & Power | Sam | Harry |
| Fluid Delivery | Jasper | Marton |

## Project Outcomes

What will your project deliver? What are the expected project outcomes?

This project will deliver and unmanned fire truck capable of putting out fires of different heights. It will deliver structural, drive, control, power and fluid delivery systems that will be available to be upscaled. The outcome of this project is to have created a system that can extinguish the fire and is upscale-able.

# TIMETABLE

## Team Member Availability

When do team members have free time, from their own weekly timetables? These can be potential meeting times. Also note down specific days when team members will not be available due to some other commitment.

## Conflicting Deadlines

Identify the dates and/or time periods when some or all team members may need to suspend work on the project due to university/holidays or other commitments.

|  |  |
| --- | --- |
| **Team Member** | **Conflicts** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

# PROJECT TASKS

## Major Milestones

List project milestones and completion dates. Try to select a maximum of 10 major Milestones.

|  |  |  |
| --- | --- | --- |
| **Milestone #** | **Milestone Description** | **Completion date** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## Tasks to Achieve Milestones

Detail the tasks that need to be completed to achieve each Milestone above.

Provide a similar table to below for each Milestone and within it identify the duration, allocated team members and any prerequisite tasks.

**MILESTONE #**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Task #** | **Task Description** | **Duration** | **Allocated team**  **member(s)** | **Prerequisite**  **Tasks** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## Definitions for Task Success

It is important to know the purpose of each task. Why was the task needed, what was the goal?

How will you know that you have completed the task? List below the measures of success for the tasks listed in Section 5.2.

|  |  |
| --- | --- |
| **Task #** | **Success Description** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

## Gantt Chart

Insert a copy of your team’s finalised Gantt Chart here.