Author’s Names

[Email address]

Abstract

Summary of the Engineering content that includes the Robot design processes.

[Document title]

Team Information

Final Robot and Team Personnel (Insert Pictures)

WorldSkills Asia 2022 Online Challenge Mobile Robotics Technician’s Journal

A Technician’s Journal is a short and concise summary of the team’s journey from the initial task analysis through the final design solution. The total number of pages for the journal must not exceed 30 pages and should be provided in PDF format (English). Any pages extra will be ignored.

The documentation should include enough detail for another person to look at your notebook and be able to build and program your robot, or to at least follow the steps your team took to get to your final robot design solution.

Table of Contents

[1.0 Definition of the Task and Initial Analysis 2](#_Toc66630537)

[2.0 Bill of Materials 2](#_Toc66630538)

[Additional Components as per section 19 of the challenge document 2](#_Toc66630539)

[List of all Sheet based elements 2](#_Toc66630540)

[List of all 3D printed elements 2](#_Toc66630541)

[3.0 Overall Assembly Drawing 2](#_Toc66630542)

[4.0 Robot Design and Design Process 2](#_Toc66630543)

[Include experiences/lessons learned from successes and failures 2](#_Toc66630544)

[May Include more Detailed robot design drawings 2](#_Toc66630545)

[5.0 Object Management System 2](#_Toc66630546)

[Include experiences/lessons learned from successes and failures 2](#_Toc66630547)

[May Include detailed design (3D PDF) 2](#_Toc66630548)

[6.0 Electrical System 2](#_Toc66630549)

[Provide a basic wiring diagram and basic layout information 2](#_Toc66630550)

[Wiring schedule 2](#_Toc66630551)

[Wiring Schematic 2](#_Toc66630552)

[7.0 Software Programming Section 3](#_Toc66630553)

[Text file or screen snips of robot programming 3](#_Toc66630554)

[Unique Features 3](#_Toc66630555)

[8.0 Summary/ Conclusion 3](#_Toc66630556)

# 1.0 Definition of the Task and Initial Analysis

Show your initial thought process and decision making at various stages of the project.

# 2.0 Bill of Materials

Detail the Parts of the Robot. The following will be identified.

## Additional Components as per section 19 of the challenge document

## List of all Sheet based elements

## List of all 3D printed elements

# 3.0 Overall Assembly Drawing

Teams should include a 3D PDF of the final Robot design.

# 4.0 Robot Design and Design Process

Describe robot design and design process leading up to it and how arrived at this design solution

## Include experiences/lessons learned from successes and failures

## May Include more Detailed robot design drawings

# 5.0 Object Management System

Describe the object management system how you arrived at this solution

## Include experiences/lessons learned from successes and failures

## May Include detailed design (3D PDF)

# 6.0 Electrical System

## Provide a wiring diagram and layout information

## Wiring schedule

## Wiring Schematic

# 7.0 Software Programming Section

Includes code development process (not necessarily just the code)

## Text file or screen snips of robot programming

Include comments that explain the code

## Unique Features

# 8.0 Summary/ Conclusion

Final Design summary, comments, results of robot testing and conclusions