

* the client’s vision or objective
* the key stakeholders, what do they do, and how they interact
* client and other stakeholder expectations
* how your project will make things better for the client and other stakeholders
* project milestones, scheduling and deliverables for the semester
* technical and other constraints (eg. reliability, security, safety)
* identification of resources, risks, potential costs and who will bear them
* completion of [Non-Disclosure Agreement and any Intellectual Property](https://cs.anu.edu.au/TechLauncher/current_students/course_outline/ip) concerns
* the setup of tooling for development, management of tasks, and project repository

E Asset Tracking

Public Repository Drive - <https://drive.google.com/drive/folders/1BfC2GblDcJzaHpplwMftEAtmfsnnyhIr?usp=sharing>

# Team Roles

Robert Whittaker - Team Manager, Software

Jordan Schaeffer - Finance, Parts and Hardware

Alisha Boniface - Scheduling, Hardware

Woojin Ra - Client Communication, Software

Dillon McGrath - Scribe, Hardware

Franklin Wilson - Hardware

# Client Vision

Thales’ vision is to develop a tracking system for equipment and personnel to improve safety and efficiency in mining and oil rig environments. The client has a broad scope for the project all of which would be impossible to complete in the time required, although the client did not want us to work on every aspect of this scope and has allowed us to decide which aspect we will focus on.

The client wanted us to work on the project in two unique parts. The first part is to research possible competitors designs and to submit a report detailing them. The second stage of the project is to design and build a prototype.

# Project Purpose

The proposed project’s name is personnel/asset tracking on an offshore oil rig and/or mining operation. The project

# Stakeholders

There are multiple different stakeholders of the project. These include: the team, THALES, mining and oil companies and their employees.

**Team**

The team directly affects the success of the project. The team has a deep desire to achieve a meaningful outcome for THALES. The team aims to do the best work possible to not only meet the course assessment but more importantly deliver the project to THALES.

**THALES**

THALES is the client of the project making them and the project team the two most important stakeholders in the project. THALES have an interest into this space as a potential future technology which they can sell. The success of this project could be a major factor in whether THALES pursues this technology further.

**Oil and Mining Companies**

Since THALES aims to market and sell the system to a third party, the oil and mining companies that would purchase it are important stakeholders for the project and their needs have to be considered. Although there are no specific companies at this stage, knowing where the technology will be used forms some boundaries on the design and gives information about the operating environment for the project. This also opens up the opportunity to contact the oil and mining companies to better understand how they could benefit from an asset tracking system.

**Oil and Mining Company Employees**

If the project ends up being a success, the safety of employees that work in mines or on oil-rigs may be improved. Once again there are no specific companies in mind however this group is still an important stakeholder in the project.

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# Milestones, scheduling and deliverables (Timeline)

Week 1 - Team Formation, Bootcamp

Week 2 - Organise team, Plan Project, Create Audit 1 material

Week 3 - Give Audit Presentation, Tag Reports, Think of possible designs

Week 4 - Research

Week 5 - Design Prototype, Create Audit 2 material

Week 6 - Give Audit Presentation, Tag Reports, Finish Designing prototype, order parts

Week 7 - Continue Building Prototype

Week 8 - Continue Building ProtoType, Basic Tests on Prototype

Week 9 - Tests on Prototype, Fix Problems, Prepare for Handover, Create Audit 3 material

Week 10 - Give Audit Presentation, Tag Reports

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# Resources and costs

The budget is limited to the $100 available from the Techlauncher program. This money will mainly be spent on parts needed to design the prototype.

# Risks and constraints

The main risk involved in this project center on IP and confidentiality. THALES develops a number of unique systems that it sells to various clients and does not want any information about future projects leaking to their competitors. It is therefore important, since we are an external group working for THALES, that we place a premium on the security of information provided. Care and consideration has been put into the the best way to store information to maximize efficiency from the project team and ensuring that only public information is available for viewing by observers. In some circumstances this may be a constraint on the observer accurately assessing the work undertaken by the group. If this is a concern the observer should contact the group for clarification.

Throughout the project the team could be constrained by the IP of others. The asset tracking we have been tasked to develop will not be a world first as other companies, like Strava, already offer similar services. Without proper research into the current market to identify a gap, we risk delivering a product to THALES that is protected by the IP rights of another company, making it worthless to the client. With this in mind, a market report will form a large part of our deliverable to the client, outlining all of the various competitors on the market and the niche that our system fills.

There may be some safety risks associated during any prototype construction and testing however these will be addressed as they become apparent and the appropriate risk assessment and mitigation strategies will be taken.

# Meetings

//Provide Link to Meeting History Google Doc//

Not all meeting notes are not available for public viewing as they may contain sensitive information that we cannot disclose.

**Team Meetings**

The team has weekly meetings, usually at the time of 8:00 - 10:00 am on Wednesday. During these meetings we discuss what tasks that we have performed over the last week. This allows us to find tasks which a member of the team may be struggling with. We will also talk about what tasks each team member will work on in the following week.

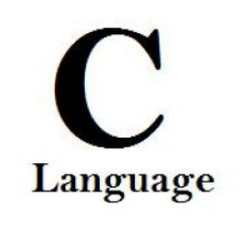
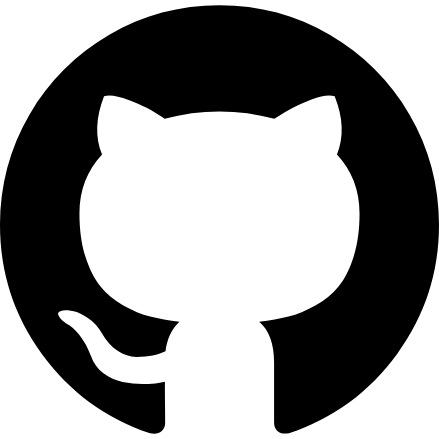
**Tutor Meetings**

The team has weekly meetings with the tutor. In this time we either perform an audit presentation or inform the tutor and the shadows of our progress. The tutor and observers will then give us recommendations allowing us to improve upon our work.

**Client Meetings**

The team has fortnightly meetings with the client. In this time we communicate with the client by asking questions and receiving feedback for the work which we have to complete. These meetings will be held in the THALAS office complex off-campus, thus making it easier for the client to meet us.

# Tools



**GitHub**

Our team has decided to use the issues function in GitHub as one of our main management tools. The team will create issues for all tasks that need to be completed. The issues are then added to cards within the Projects feature within GitHub. These cards are then sorted into the To Do, In Progress, Needs Checking and Done columns. This feature allows our team to assign tasks effectively and track the project.

Forgot to talk about how we will use it as a repository

**Coding Language**

When building the prototype (estimated at week 7) our team will need to program some code. To do this our team is required to choose a programming language in which to program with. At this point in time it seems that the most likely language that we will use will be C. C is the most common language that the majority of the team have experience in. Another benefit is that it has applications in software and embedded hardware applications.

**Google Drive**

Google drive will be used to manage documents containing research, meeting notes, planning, decisions etc. It will be separated into a private and public section to ensure the security of any confidential information provided by Thales. Only the public section will be available for viewing by observers.

**Slack**

Our team has decided to use Slack as the main communication mechanism for team members. We found that it was best to have multiple different channel for different topics. This made it easier for us to keep track of conversations.