Team Profile – Career

Modifications as below:

Within this team of five people, there are only two that declared their “ideal job” to be the same one, with both Malcolm and Minh desiring to become software engineers. Darren has listed his ideal job as a network engineer while Sisi aims to become a cloud engineer, which stems from her prior work history. Lastly, new joiner to our team Connor wants to be a full stack developer, as he feels the job requires an infinite high skill and want to dedicate his passion this craft. Between the five jobs, Full Stack Engineer and Software engineer have the most similarities between them with both dealing with databases, servers, systems engineering, and clients. The main difference is that a full Stack developer encompasses all areas of the front and back end development knowledge and process and is well rounded to tackle all areas of the entire life cycle (freecodecamp.com,2020).

It can be argued that the job of a cloud engineer can be similar to either that of a network engineer, as they can be required to both manage cloud network (Stewart, 2019), or of a software engineer, designing and implementing software to suit the needs of their client (Intellipaat Blog, 2019), depending on their specific role. The role of software engineer can also be quite varied depending on what is required by the job and/or client, but generally involves designing, developing and creating various software implementations, either at the application or system level (Indeed.com, 2019). Across the group, the majority have listed “ideal jobs” that require a moderate degree of experience beyond a Bachelor’s degree.

Another commonality across all 5 “ideal jobs” is that we all want to be a developer/engineer in a general or specific area. All jobs require a level of interaction to work in a team and therefore requires effective communication. Working on group assignments is a skillset we will be able to bring to our ideal job roles, where each member collaborated and provided creative ideas and solutions. In this Assignment 3 we were able to improve on these processes. For example, team members pointed out to each other what they should be mindful of before starting the task when researching and compiling the information to refine and cover the marking rubric guide to get the expected outcome with in depth comprehension and high-quality work. This is a much-needed skill as an engineer/developer to have a clear understanding from the start and to connect it with other areas of the entire project.

Scope and Limits

**MILESTONE 1**

**Project Objectives:**

Develop a Garage Door open/close App using Raspberry Pi technology using Python language with sensor technology to track date/time opened or closed. Featuring real-time weather integration for related use cases in the useability of the product.

* Price: $90AUD estimate as per competitor pricing (Postscapes, 2020)
* Hardware Cost: Raspberry Pi cost $35USD (Amazon, 2020)
* Quantity to be manufactured: 1000 targeted
* Schedule: To complete milestone 1 and testing for delivery to consumers within the project deadline week 17
* Estimated budget and costs: Project Organiser to limit expenditure costs for hardware, rollout and software required

**Product Scope Definition:**

* First phase is delivering a product that will open and close the garage door successfully with a one button open and close online via the website or through the App.



Image #: (Reliable Garage Door Services, 2020)

* Sensors that alert if the door has been open for more than a set period of time from Raspberry Pi technology. Time can be set like an alarm and once reached will provide a push notification.
* Weather feature to allow users to get the latest to prepare for bad weather on the road, integrated by API via Bureau of Meteorology

Website: WordPress/Wix website builder (WordPress, 2020) (Wix, 2020)

Mobile App: Mobincube App builder$35.88USD annual fee (Mobincube 2020)

Mobile compatibility software: iOS and Android

**Project Requirements:**

This section covers the deliverables across all stakeholders for the completed outcome for milestone 1 which will be our debut product.

Milestone 2, will be the enhanced and enriched version, providing users with more functionality and improved user experience which is our future product that will not be in the current scope but is where we will ultimately like to get to get ahead and obtain our own market share.

Deliverables:

* Hardware: Developing team to construct and code the hardware using Raspberry Pi (Python) for the physical attachment to the garage using DIY wire connection
* Manufacturing/Packaging: Developing team to work and communicate with Labx7 for protype and to perform functional tests, stress tests, performance tests, anti-interference tests, product life tests, high and low temperature tests and other reliability and performance tests, China manufacturing company that is cheaper in cost (Labx7, 2020).
* Testing: QA testing to be done by the Full Stack developer as we have a lean team and he is multi skilled in testing and to obtain Australia Certified SSA Approved (SAA Approvals, 2020)
* Installation: Easy DIY installation with instructions connection through wires
* Guarantee: Covered under Product development and marketing to provide 30 day returns and 12 months warranty
* UI/UX: Project Organiser and Product Manager/Marketing to create a good-looking user face website and App creation for testing and for connectivity with the hardware via Internet/WIFI connection

**Project Boundaries:**

* Insurance: No cover for accidents and wear and tear
* Customer Service: All queries and support are via email
* Stock and Availability: Currently sold locally to Australia only via orders on our website
* Guarantee and Warranty: Must be registered with official receipt
* Support with third party Smart Home Apps: Support is not included when wanting assistance with connecting to Apple HomeKit, Google Assistant, Amazon Alexa IFTTT
* Controls: All controls for the Garage Door Opener is via the mobile app or website and can connect up to 8 mobile devises
* Limit: 1 device to 1 Garage door only

**Milestone 2:**Post product launch and after receiving feedback from loyal client base and to keep up to date with market advancements and competitors.

**Project enhancements for the future not in this scope:**

* To integrate with Smart Home Apps like Apple HomeKit, Google Assistant, Amazon Alexa IFTTT
* Incorporate cheapest fuel prices via API for enriched product to provide value and savings
* Camera, as an enhancement for security e.g. can have delivery parcels from Amazon, postal to be dropped off in the garage for security and on days with bad weather. Also, video recording abilities as a black box feature.
* Home App integration for lights control in the house
* Limit: 1 Garage door to 3 Garage door controls