RMIT UNIVERSITY

Project Parking Finder
PROJECT CHARTER

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Date: 12/08/2019
Sponsor: RMIT University
Number: Project #1
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Syed Hariz Bin Syed Azmi S3701799

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Document Control

File Directory	https://drive.google.com/drive/u/3/folders/1SKLbEox7Cu37Kzm6w5AGCaeSYRMLU_h- Parking locator - Project Charter

Distribution

Version	Issued	Recipient	Entity / Position
V 1.0	11/08/2019	Ameer Albahem	Product Owner

Amendment History

Section	Page	Version	Comment
<Enter Doc. Section No.>	<Enter Page No.>	<Enter Version No.>	<Enter Comments to explain the reason for the document text or other changes, e.g., Updated text after walkthrough with the stakeholders, or e.g., Updated section after technical consultation>

***No amendment have been made this early in the project timeline.**

Staff or Entities Consulted

Name	Position / Organization
RMIT University Ameer Albahem	Sponsor Product Owner

Related Documents

Name	Author	Description
N/A	N/A	N/A

Preface

The purpose of this document is to outline the Charter for the parking locator project. It serves as an agreement between the project team, the sponsor and the supervisor. It outlines the project's purpose and how the project will be approached, resourced, managed and delivered. Any amendments after this document has been signed off will be via addenda.

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1 Project Summary

The proposed project is a parking space allocation android application which will be a hybrid between project one (matchmaking system) and project three (car share scheme) where the objective is to create an android mobile application that can math a driver with vacant parking spaces that are in close proximity using the Melbourne city API and displayed on a map display. While the application is in use, the user will receive notifications of available parking spots near them that are available for either short term (24 hours) or long term where the user can pay monthly to reserve a parking space. When a reservation has been made, the owner of the parking space will receive a notification via text message and email to inform them of the reservation with the customers user profile.

The main objectives are to have the main functionality of user registration, login capability, ability to lease and book parking spaces based on duration preferences and to cancel parking reservations. The application will include additional capabilities such as a search filter based on the users requirements as well as allowing users to add reviews based on experiences.

2 Project Sponsor

The project sponsor is Ameer Albahem of RMIT University. Royal Melbourne Institute of Technology or informally called as RMIT is an Australian public research university in Melbourne. RMIT is a global university of technology, design and enterprise which aims to bring impact and life-changing experience to its students. Information Technology students undergo a process of completing mandatory Programming Project course to expose IT students with hands-on practical experience developing IT solutions or developing a software in a project environment. The prominence of completing this course is to help IT students on understanding and working within corporate environment by practicing formal project and software delivery methodologies. Within the course, a supervisor is assigned to consult and assist group of students to plan their project. Aside from being a PhD researcher in RMIT, Ameer Albahem is one of the supervisors in charge of Programming Project course.

3 Stakeholders and End Users

The key Parking Finder application stakeholders are Ameer Albahem – Product owner, Yazeed Othman – Scrum Master, Timothy Novice, Raymond Chi, Syed Hariz Bin – Development Team, City of Melbourne Parking Lease holders, Driver customers. The primary stakeholders are parking space lease holders in and around CBD Melbourne. They have car spaces that they may not need to use all year round and seeking to monetise their car spaces when they’re not using them. The lease holders’ interests are being represented by product owner Ameer Albahem.

The customers are drivers who are willing to subscribe and pay a fee to rent these unused car spaces from the car space lease holders. They are from disparate backgrounds and have varying parking requirements including long term parking and adhoc short term parking. Some customers will work or live locally and others will be ad-hoc and just visiting the region covered by the application. The Development team for the parking finder application seek to deliver a profitable outcome for the car space lease holders and a user-friendly experience for driver customers seeking to

rent spaces in the coverage area. The product owner is tasked with ensuring the Lease holders get a product that is suitable for their needs.

4 Appointment of Project Leader

The project leader is Yazeed Othman. The project leader was appointed due to undertaking the role of scrum master with previous experience with the role in past projects undertaken within the university. The decision was a mutual agreement between all team members as the individual has leadership skills and is willing to speak on behalf of the group during meetings with the supervisor.

5 Project Team Members

The project team members and their respective roles are:

Yazeed Othman - Scrum master which includes responsibilities such as clearing obstacles for the team, allocating tasks, being responsible for maximising team productivity as well as setting up and conducting meetings such as sprint planning meetings and sprint review meetings. The scrum master will be the team representative throughout the duration of the project.

Timothy Novice - Scrum team with the core responsibility of developing the application

Raymond Chi - Scrum team. Responsibilities include developing the application, writing up meeting minutes after meetings are concluded.

Syed Hariz - Scrum team with the responsibilities of developing the application and documentation

6 Project Methodology and Approach

Our team's main location is RMIT City Campus. We will be hosting regular scheduled meetings at least 2 days a week, with additional meetings if needed. Our two weekly scheduled meetings are as follows:

- Tuesday 3:30pm RMIT Building 8.8.47
- Friday 11:00am RMIT Swanston Street Library

We will be adopting an agile development methodology for this project. We will be using Scrum for this project. Scrum uses an incremental and iterative approach to project development. One notable document of Scrum is the product backlog. The product backlog contains a list of user stories which will drive the features we will implement in our project.

Software development life cycles are broken into sprints which have a duration of 2 weeks. Sprints contain a sprint backlog which contain tasks from the product backlog. The sprint backlog is a list of tasks/features our team will set to accomplish before the end of the sprint. The tasks selected for the sprint backlog depend on the priority of the task as set on the product backlog.

Scrum is our chosen approach as it is the most suitable methodology for this large project. By using Scrum as our approach we can break down our large projects into smaller stages with each stage providing us a feature of our final product we can present to our client. Scrum also allows us to receive feedback from our client and re-prioritize or add in new features if required.

7 Project Governance

In order for the project to be governed thoroughly, we have created a GitHub repository to save all the code we create throughout the project duration as well as to have a clear view of the progress from the first day until the final day of the project. When it comes to communication, we initially emailed one another but it was not an efficient method of communication so we have decided to use slack as our main source of communication as it will be a more responsive platform that includes each member of the team as well as the product owner. A trello board has been created in order to have a clear structure of each task to be completed for each sprint and the team member that has been allocated to the task. The trello board will contain sprint zero to three, the tasks involved for each sprint as well as meeting minutes as proof of meetings that have been conducted throughout the duration of the project.

Each week, we will have one meeting with the product owner to showcase the progress of the project including finished tasks and to discuss any issues encountered. A second meeting is conducted each week as a team but without the product owner to review the completed tasks, tasks that are yet to be commenced as well as assigning tasks to team members during a sprint or for the next sprint. In order to manage scope creep, user stories have been created to distinguish between the most important features that must be included and can be achieved within the project duration and decide which features to discard that we felt could not be implemented on time. Each member has been assigned specific roles for the project: Yazeed will be the scrum master and will be assigned key responsibilities such as clearing obstacles for the team, responsible for maximising team productivity as well as setting up and conducting meetings such as sprint planning meetings and sprint review meetings. Raymond chi is part of the scrum team with the responsibilities of developing the application, writing up meeting minutes after meetings are concluded. Timothy and Hariz will also be part of the Scrum team and will primarily be developers with the main responsibility of developing the application.

As part of risk management, the scrum master will organize team meetings every week to discuss ongoing progress of the project and any future planning required which will reduce the chances of poor time management. User stories were created by team members and reviewed during a team meeting which helped analyse which features must be completed and implemented first in case of unforeseen circumstances occurring that can cause a delay in developing the application. Poor communication is a major risk which can cause significant delays and conflict within the team which is why multiple communication platforms have been such as slack has been created. A google cloud platform is used to store data which will also act as a backup platform for all saved data throughout the duration of the project in case of unexpected circumstances such as natural disasters.

8 Project Scope & Deliverables

8.1 PROJECT OBJECTIVE

Building a user-friendly and interactive android based application for Android phones. Parking Locator is a system that displays real-time parking space data for its users to allocate empty parking spaces both private and public within the selected region. Parking Locator acts as a centralized platform where it includes interactions from the owner leasing out a parking space(s) to its users searching for available parking space. The objective of Parking Locator development, we aim to remove a problem that is usually faced by drivers in the city of Melbourne which is finding an available parking space. The general idea of implementing this system is to enable its users to plan ahead before driving out to the city by making a booking for a private parking spot while simultaneously provide a business opportunity for parking owners to lease out their parking space(s) monthly or weekly. The team are focused on building a high User Experience and User Interface product to maintain an easy-to-use and straightforward reputation from our potential users.

8.2 DELIVERABLES

- Log in & sign up system
- Google Cloud Platform as system database
- Real time parking spaces data usage from Melbourne City API
- Google map API to display available parking spaces
- Google Distance matrix API for navigation tool
- Booking management system
- Notification system
- Search filter to promote high usability of the system
- User review
- Subscription system
- High User Interface and User Experience product

8.3 MILESTONES

1. Proposal submission — August 12 (Week 3)
2. Project work — Week 4 -12
3. Draft submission — Week 8 - 12
4. Draft submission tune — Week 13 - 15
5. Final submission — Week 15

8.4 TECHNICAL REQUIREMENTS

1. Application will be built in Android and compatible with any Android devices such as Samsung, Google Pixel and Huawei.
2. All 10 features listed will be completed.
3. Google Cloud platform is used as system's database.
4. Security of user's information relies on Google Cloud Platform security features.
5. Melbourne City API will be used to feed real time parking space data to the system.
6. Trello application is used for project management.
7. Slack application is used for team communication.
8. Documentation are saved in restricted access Google Drive.
9. Product codes are being submitted into restricted access Github repository.

8.5 LIMITS AND EXCLUSIONS

1. The application will be built to the specifications and design of the proposed project and will be handed to the supervisor Ameer Albahem and RMIT University.
2. Application will be delivered in Android based application only.
3. Extra credit account for Google Cloud Platform will not be charged to RMIT University.
4. Submission of project must meet dateline.
5. Team members are responsible for tasks that are agreed upon.
6. Team Meeting will be held on Tuesday 3:30PM to 5:30PM and Friday 11AM – 12:30PM.

8.6 PRODUCT REVIEW AND STAKEHOLDER

Ameer Albahem
Programming Project 1 Supervisor of RMIT University
Email: ameer.albahem@rmit.edu.au

Park Finder
Meeting Minutes

Weekly Scrum Meeting Minutes
Meeting No: 3 Week 2

Date:	30/07/19
Venue:	Building 8.8.47
Attendees:	Raymond, Yazeed
Apologies:	Timothy
Absences:	
Copy To:	

No.	Issue	Discussion	Action	Member
1	Search for 4th team member	We are still currently looking for a 4th team member. We'll discuss possible options with our tutor. Yazeed has made a post on the discussion board that we're looking for a 4th team member.	Post onto the discussion boards that our group is looking for a 4th member	Yazeed
2	Possible addons for our project	As proposed by our tutor we should consider having alternative functions for our parking finder application. Examples would be - Notifying the user when a parking spot opens in a specific area specified by the user - Displaying historical data for the user to review, similar to how google displays "busy times" and "waiting times"	Discuss our options during our next meeting.	All
3	Additional details to Trello	As discussed with Ameer we should include additional columns onto our trello board.	Add additional columns to Trello and add relevant cards	Raymond

		Examples are - Weeks for each sprint (eg. sprint 1 week 1) column which'll have its own tasks - Other links that'll connect our trello to slack and our github respository - Meeting minutes which will have a copy of the meeting minutes attached.		
4	Arrange for a regular meeting schedule	As of now our meetings are whenever we are free and have previously discussed during our meetings. We should arrange for a regular meeting schedule eg. Every Wednesday 3:30pm	Discuss on Slack and email potential times we can do regular meetings	All

Park Finder
Meeting Minutes

Weekly Scrum Meeting Minutes
Meeting No: 4 Week 3

Date:	02/08/19
Venue:	RMIT Library
Attendees:	Raymond, Timothy
Apologies:	Yazeed
Absences:	Syed
Copy To:	

No.	Issue	Discussion	Action	Member
1	New Team Member	Our post on the discussion boards was a success. We have recruited a new team member. Let's all welcome Syed Hariz	New team member - Syed Hariz	All
2	Debriefing New Team Member	Syed Hariz has recently joined our project, We will have to arrange a meeting with him and debrief him about our plans for the project. Timothy, being the man behind the idea and the main developer wiill arrange for an online meeting to discuss with him what our project is all about.	Arrange an online meeting with Syed	Timothy
3	Trello or Google Drive for files?	We have discussed where we should all store our latest up to date work for submission. In order to avoid redundancy and accidentally submitting the wrong versions of work Trello will be where we grab all up to date documents.	Trello is the place for latest up to date documents.	All
4	Assignment 1	We will need to submit for A1 due Week 3 - Infrastructure Summary (3)	Get all the documents required to submit ready	All

	Submission around the corner	- Project Charter (3) - All Meeting Minutes (3) - Time Sheets (1)		

Park Finder
Meeting Minutes

Weekly Scrum Meeting Minutes
Meeting No: 5 Week 3

Date:	06/08/19
Venue:	Building 8.8.47
Attendees:	Raymond, Timothy, Yazeed, Syed
Apologies:	
Absences:	
Copy To:	

No.	Issue	Discussion	Action	Member
1	Time sheets	We have all decided to use Toggl, an online time tracker tool to help us with time sheets. Syed Hariz has created a Toggl workspace and has invited all of us into it. We will input all of our past time spent on the project into the Toggl and use it from here on in to track exact time spent.	Use Toggl to help with time tracking for time sheets.	All
2	Parking hound vs our current project	We've have fleshed out our project and identified what our core functionality will be, that is providing users with a map of the city that'll pinpoint which public parking spaces are free, their duration and which ones are currently occupied. We have been suggested by our tutor Ameer to take a look at "Parking Hound" which is a similar app to ours and see if we can build and improve on it. We will be creating as many user stories for both parking hound and our current project and comparing them on our next meeting to see	Create as many user stories for our current project and parking hound. Parking hound - Yazeed/Syed Current project - Timothy/Raymond	All

		which project has more functionalities we can create.		
3	Work on first submission	For our first submission we have to submit the following documents. - Project charter (Shared responsibility) - Time sheets (Individually complete) - Meeting minutes (Completed by Raymond) - Infrastructure summary (Timothy WIP) We have set names to sections of the project charter which we will have to complete by friday.	Work on project charter. Complete timesheets on Toggl and create infrastructure summary.	All
	Project charter	Sections of the project charter have been assigned to team members. We will now begin to finish the document.	Complete project charter	All
	Infrastructure summary	Timothy has volunteered to complete the infrastructure summary as he is our main developer.	Type up infrastructure summary	Timothy
4	Regular meeting times	We have all decided to establish a regular meeting schedule outside of our designated class. This weekly meeting will take place every Friday 11am at RMIT Swanston Library.	Friday 11am RMIT Swanston Library meeting every week	All

Park Finder
Meeting Minutes

Weekly Scrum Meeting Minutes
Meeting No: 6 Week 3

Date:	09/08/19
Venue:	Building 10.7
Attendees:	Raymond, Timothy, Yazeed, Syed
Apologies:	
Absences:	
Copy To:	

No.	Issue	Discussion	Action	Member
1	Change of project	After comparing user stories for our current project and parking hound, we have all as a group agreed that parking hound would be a better app to develop as it has more implementable features than our current project. We will now be designing a mobile app akin to “Parking Hound”	We are now working on a mobile application similar to “Parking Hound”	All
2	Writing up user stories	Raymond, Yazeed and Syed will write up user stories for our new mobile application. These user stories are due before the end of 09/08 and will all be forwarded to Timothy.	Write up user stories to forward to Timothy before 10/08	Raymond, Yazeed, Syed
3	Sorting user stories and posting onto Trello	Timothy will later today be receiving user stories later today. Timothy will be sorting out the user stories and posting them onto our shared Trello board.	Post user stories collected from other group members to post onto Trello.	Timothy
4	Getting everything for first submission	The list of tasks still need to be completed to be submitted before Sunday night. - Infrastructure summary (Timothy) - Gantt chart (Yazeed/Raymond) - Time sheets (All) - Project charter (All)	Finish off and post required documents for submission one due 12/08 10am.	All

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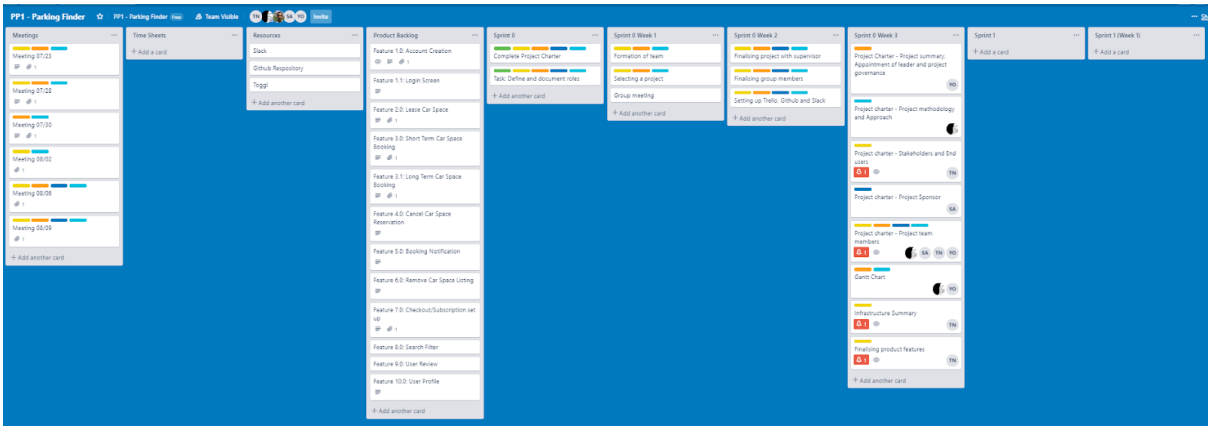
Project Parking Finder Infrastructure Summary

Tools summary

1. Trello Board

The project team are using Trello to track project tasks across sprints. Sprints are subdivided into weekly blocks (as shown in figure 1.0).
The trello link is: https://trello.com/b/ufmV9L2U/pp1-parking-finder

Figure 1.0



2. Github Source Code Repository

The project team is using Github for centralised source control. The Github code repository is located at https://github.com/Riger73/parkingfinder.git.

The methodology the team is using is to have the repository divided into a master branch which requires approval to merge into or change, feature branches, and debug branches (as shown in figure 2.1). A screen shot of the current repository is included below (in figure 2.0):

Figure 2.0

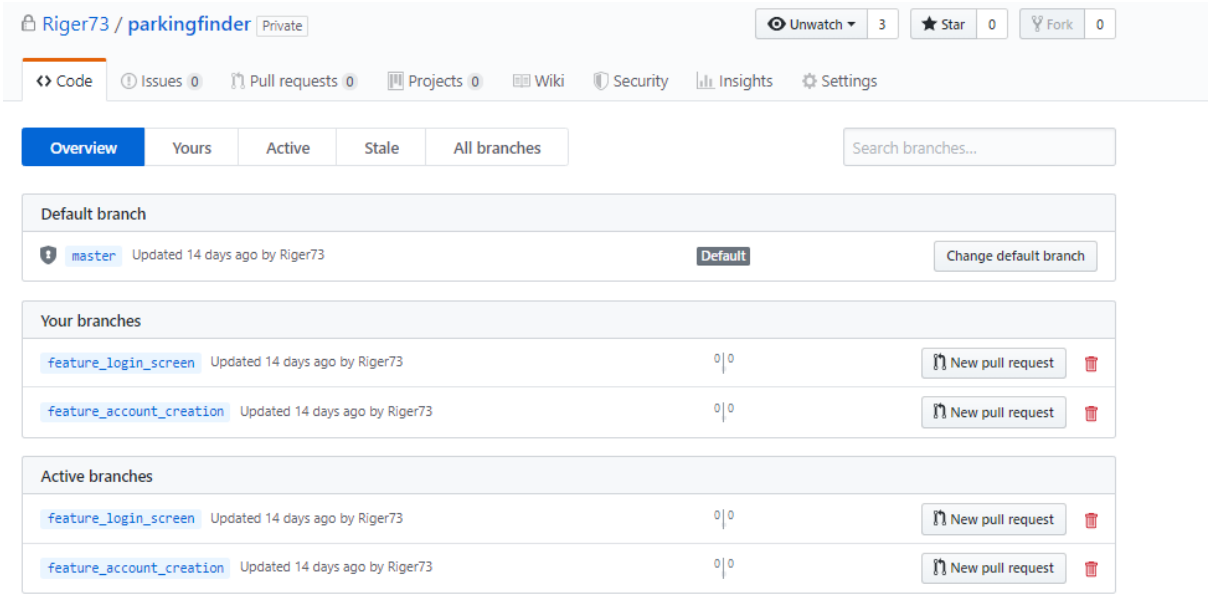
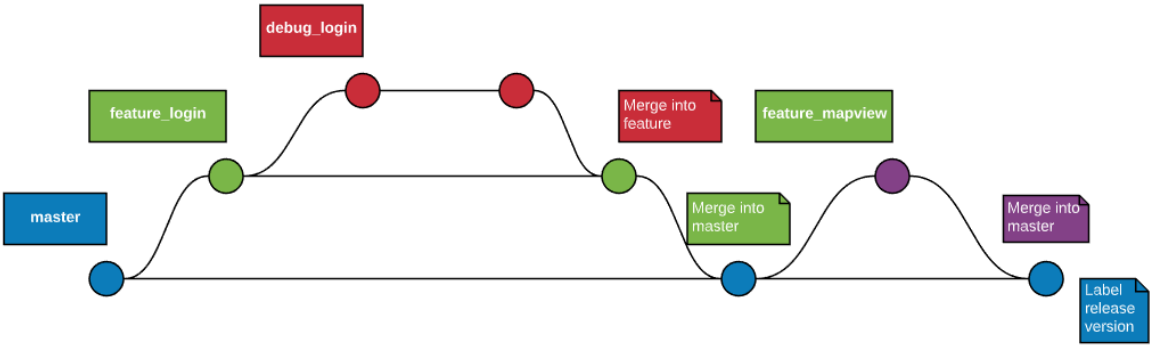


Figure 2.1



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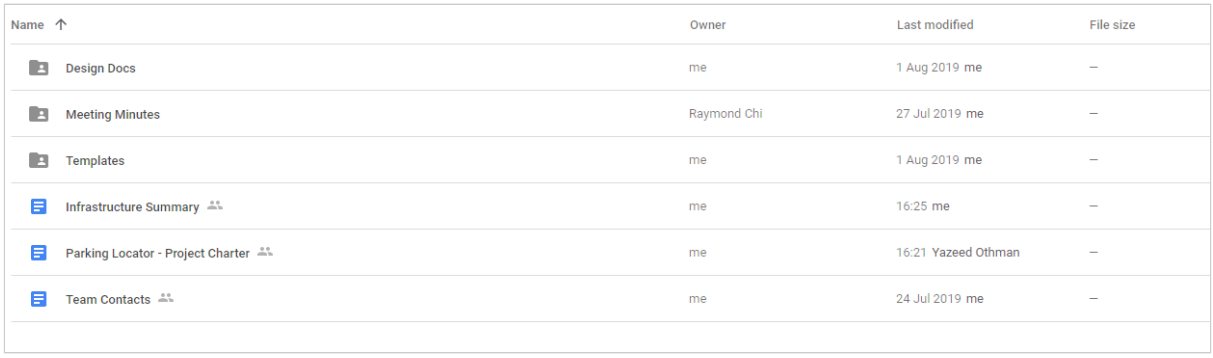
3. **Google Drive Document Repository**

The project team is using Googledrive as the primary document control repository: https://drive.google.com/drive/folders/16j9m_OfPbrSPfH-NYqjYahOzW4bgEQjB

Documents are organised by type (as shown in figure 3.0).



Name	Owner	Last modified	File size
Design Docs	me	1 Aug 2019 me	–
Meeting Minutes	Raymond Chi	27 Jul 2019 me	–
Templates	me	1 Aug 2019 me	–
Infrastructure Summary	me	16:25 me	–
Parking Locator - Project Charter	me	16:21 Yazeed Othman	–
Team Contacts	me	24 Jul 2019 me	–

4. **Google Cloud Database hosting**

The project team will be hosting a My-SQL datastore on Google Cloud Platform: https://console.cloud.google.com/iam-admin/settings/project?project=avid-invention-249406&authuser=2&organizationId=0