

ESCUELA SUPERIOR PÓLITECNICA DEL LITORAL

ALAMEDA DEL RÍO

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SUBJECT: SOFTWARE ENG. II

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DEADLINE: 2020/07/12

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1. Abstract

This document contains the report corresponding to the project "ALAMEDA DEL RÍO" of GROUP#4 belonging to the SOFTWARE ENGINEERING II course of 2020-PAO I.

The report contains a description of the project, client information, scrum methodology, implementations, and important decisions.

2. Description

The project is a continuation¹ of the project of **SOFTWARE ENGINEERING I** course of **2019-PAO II**.

¹ ESPOL have a Software Engineering program that consists in two courses in two semesters, the project in the second course is a continuation of the project in the first semester.

2.1. Client

The client of the project is **"Alameda del Río"**, Alameda is urbanization in Guayaquil near to Daule river and Terminal Terrestre Highway.

The represent of **Alameda** in the project is Eng. Pedro Xavier Gavilanez Chiriboga, president of "Alameda del Río".

2.2. Team

The team initially consisted of four members that carried out the requirements gathering and the tasks of **SOFTWARE ENGINEERING I** course of **2019-PAO II**. The initial four members are:

•

In **SOFTWARE ENGINEERING II** course of **2020-PAO I** the team received new incorporation completing five members². The new member is:

Aguilar Mora Oswaldo Josmany

2.3. Tutor

The tutor of the project in **SOFTWARE ENGINEERING I** course of **2019-PAO II** was Dr. Carlos Mera, in the second part of the project in **SOFTWARE ENGINEERING II** course of **2020-PAO I** the tutor continues another term with the team.

2.4. Product

The initial scope of the project in **SOFTWARE ENGINEERING II** course of **2019-PAO II** consisted in a Web Administrator, database, Mobile apps for residents and security staff, hardware implementation in urbanization but since the COVID³ emergency in Ecuador and the mobility restriction affect the final scope consists only in:

Web Administrator.

² PhD. Carlos Mera in the course of Software Engineering II increase teams' size to 5 members.

³ In the final of first semester of the year Ecuador was affect with a global pandemic, this pandemic was occasioned for the COVID-19 virus, mobility restrictions were decreed in order mitigate the pandemic. This restriction affects the scope of the project.

- Resident Mobile App.
- Security Staff Mobile App.
- Database.

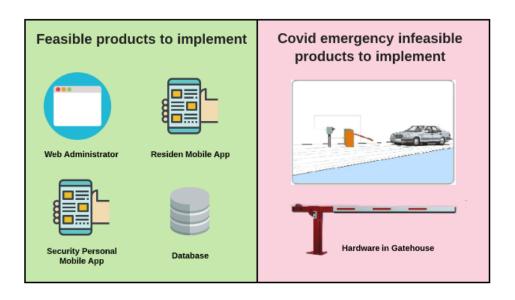


Figure 1.- Redefinition of project scope for COVID emergency.

3. Product Specifications

3.1. Web

The client requires a Web module for the Administrator, in this module the administrator will create de profiles of residents and security staff, the management of these users, and the possibility of generating aliquots and reports.

3.2. Resident Mobile app

The client requires a mobile app for the resident, in this app, the resident will control the staff information, will generate invitations for his friends, and receive the information and deadlines of the aliquots. Additionally, the resident will receive a notification when a visitor shows up at the gatehouse of the urbanization.

3.3. Security Staff Mobile app

The client requires a mobile app for the security staff, in this app the security staff will see the actives invitations and send to the resident the notification of the visitor in the gatehouse. Additionally, the security staff will see the information on payments and aliquots of the residents in order to authorize or deny certain services to the residents.

3.4. Component Diagram

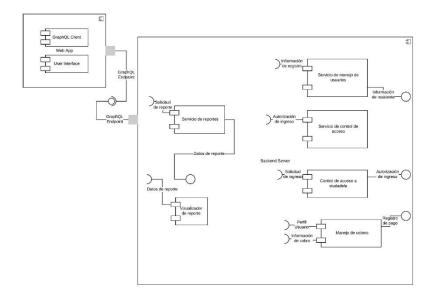


Figure 2.- Alameda Project - Component Diagram

3.5. Deployment Diagram

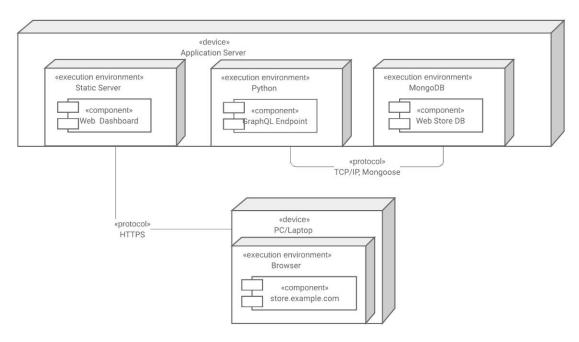


Figure 3.- Alameda Project - Deployment Diagram

4. Scrum Methodology

4.1. Roles

MEMBER	ROLE	START SEMESTER
Guillermo Enrique Bernal Moreira	Scrum Master	2019 - PAO II
Hugo Bryan Wong Pavon	Developer Team	2019 - PAO II
Karen Monserrat Bermudez Moreira	Product Owner	2019 - PAO II
Luis Eduardo Ortiz Holguin	Developer Team	2019 - PAO II
Oswaldo Josmany Aguilar Mora	Developer Team	2020 - PAO I
Eng. Pedro Xavier Gavilanez Chiriboga	Client	2019 - PAO II

Table 1. Scrum Roles

4.2. Sprints

The scrum project consists of three sprints of three week⁴, the last sprint ends a week before the second partial evaluation.

	Week 1	29-jun	4-jul
Sprint 1	Week 2 6-jul 11-		11-jul
	Week 3	13-jul	18-jul
	Week 1	20-jul	25-jul
Sprint 2	Week 2	27-jul	1-aug
	Week 3	3-aug	8-aug
	Week 1	10-aug	15-aug
Sprint 3	Week 2	17-aug	22-aug
	Week 3	24-aug	29-aug
		·	·
	Deadline	31-aug	4-sep

Table 2.- Sprints divisions and dates

⁴ The project partial report is scheduled for July 15 of 2020, this correspond to the middle of third week of the first sprint.

4.3. Team Speed

Considering the rule of 1 effort point is equivalent to 1 hour/men the team speed for a sprint is 117 points.

SOFTWARE ENGINEERING II - SCRUM ALAMEDA				
MEMBER	ROLE	H/M WEEK	SPEED SPRINT	
Eduardo Ortiz	D.T.	7,5	22,5	
Guillermo Bernal	S.M.	8	24	
Hugo Wong	D.T.	8	24	
Karen Bermudez	D.T.	7,5	22,5	
Oswaldo Aguilar	D.T.	8	24	
		39	117	

Table 3. Team Speed calculation

4.4. User Stories

The project consists of 69 user stories divided into the three roles and an initial story; the codification of the stories follows the structure(**USER-ACTIVITY-COUNTER**).

The available users' codes are:

- AL referring to Urbanization "Alameda del Río".
- AD referring to Web Administrator or Alameda Administrator.
- PS referring to Security Staff.
- RE referring to Alameda resident.

The available activity codes are:

- MC referring to the profile's management.
- FU referring to systems functionalities.
- This code isn't present in the initial story AL-00.

The counter number follow three rules and one exception:

- Is a number of two digits.
- The counter starts in 01 and it's incremental in the next story.
- In the case of the counter in range 1-9, the number was preceded by a 0 in order to complete two digits.

 The exception is in the initial project story AL-00 that refers to the environment creation.

The stories priorities are:

- Urgent.
- High.
- Normal.
- Low.

4.5. Scrum Poker

In order to estimate the user stories, the team scheduled a meeting on Friday 26 of June, the rules and considerations are:

- https://play.planningpoker.com/play/game/GaKn7U6ZdVrDnyYpsGK4rMy19FNtxgcv.
- The meeting platform is Teams, urgent, and obligatory.
- The host and environment manager are Oswaldo Aguilar Mora.
- The equivalence of an effort point is 1 hour/men.
- Three votes with the same estimation are considered a group agreement.
- In case of disagreement, the team should talk and later vote again.
- Modification of votes is allowed.
- The scale is [0, 1/2, 1, 2, 3, 5, 8, 13, 20, 40, 100, ?, Pass] and No break.
- In case of all members vote ? or Pass, the tutor vote will be considered.

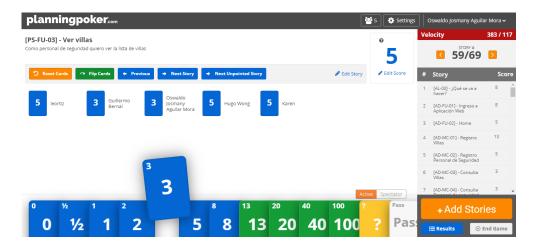


Figure 4. Scrum Poker Platform - Story 59

4.6. Backlog

CODE	DETAIL	PRIORITY	ESTIMATE
	As a client (Alameda), I want residents and		
AL-00	security staff to have mobile applications	Urgent	8
AL-00	controlled by a web application for the	Orgent	0
	administrator with the persistence of data in a BD.		
	As an administrator, I want to be able to enter the		
AD-FU-01	web control module with my username and	High	8
	password.		
	As an administrator, I want to be able to see all		
AD-FU-02	the options offered by the application and the	Normal	5
	main page.		
AD-FU-03	As an administrator, I want to be able to consult	Low	2
AD-F0-03	my registered information.	LOW	2
AD-FU-04	As an administrator, I want to be able to edit my	Low	3
AD-10-04	registered information.	LOW	3
AD-FU-05	As an administrator, I want to be able to generate	High	3
AD-1 0-03	a new item to be collected for all residences.	IIIgii	3
AD-FU-06	As an administrator, I want to be able to generate	Low	3
AD-10-00	a new item to be charged per villa,	LOW	3
	As an administrator, I want to be able to change		
AD-FU-07	the status of an item of a villa to "PAID /	High	2
	CANCELED" or "DEBT" with its respective value.		
AD-FU-08	As an administrator, I want to be able to see the	Normal	5
AD-1 0-08	general balance of debts of each residence.	Norman	3
AD-FU-09	As an administrator, I want to see the current	High	2
AD-10-03	debts of the resident.	riigii	2
AD-FU-10	As an administrator, I want to see the payment	Normal	3
AD-10-10	history of a residence.	Norman	3
AD-FU-11	As an administrator, I want to see all the payment	High	2
WD-LO-11	items created.	riigii	۷

			1
AD-FU-12	As an administrator, I want to see the information	Low	2
	on a specific payment item.		
	As an administrator, I want to see the general		
AD-FU-13	balance of the payment status of the payment	Normal	5
	item.		
AD-FU-14	As an administrator, I want to see a list of the	Normal	2
AD-10-14	villas missing to cancel the payment item.	Normal	2
AD-FU-15	As an administrator, I want to edit the information	Low	2
AD-F0-13	of an existing payment item.	LOW	2
AD-FU-16	As an administrator, I want to delete a created	Normal	3
AD-F0-10	payment item.	NOTITIAL	5
AD-FU-17	As an administrator, I want to see the history of	Normal	3
AD-FU-17	visits by the villa.	NOTITIAL	5
AD-FU-18	As an administrator, I want to see the visit history	High	3
AD-10-18	of Alameda.	riigii	3
AD-FU-19	As an administrator, I want to receive daily	High	13
AD-10-13	reports of visits to the urbanization.	riigii	13
	As an administrator, I want to receive daily		
AD-FU-20	reports on the status of the items and debts in the	High	13
	urbanization.		
AD-FU-21	As an administrator, I want to see comments and	Low	3
AD-10-21	suggestions from residents.	LOW	3
AD-FU-22	As an administrator, I want to respond to these	Low	2
AD TO ZZ	comments and suggestions.	LOW	2
AD-FU-23	As an administrator, I want to receive daily	Low	5
AD-10-23	reports of comments and suggestions.	LOW	3
	As an administrator, I want to be able to mark or		
AD-FU-24	categorize the comments and suggestions that I	Low	3
	receive.		
AD-FU-25	As an administrator, I want to be able to log out of	High	1
AD-FU-23	the web system.	riigii	1
L			

AD-MC-01	As an administrator, I want to be able to register residents in the app.		13
	As an administrator, I want to be able to register		
AD-MC-02	the security staff in the application.	High	5
	As an administrator, I want to be able to consult		_
AD-MC-03	the accounts of the residents.	Normal	3
45.440.04	As an administrator, I want to be able to consult		2
AD-MC-04	the accounts of the security staff.	Normal	3
AD-MC-05	As an administrator, I want to be able to edit the	Low	4
AD-IVIC-05	profile fields of the residents' accounts.	Low	4
AD-MC-06	As an administrator, I want to be able to edit the	Low	2
AD-IVIC-00	profile fields of the security person's accounts.	LOW	2
AD-MC-07	As an administrator, I want to be able to cancel	Low	2
AD-IVIC-07	the account associated with a resident.	LOW	2
	As an administrator, I want to be able to cancel		
AD-MC-08	the account associated with a member of the	Low	2
	security staff.		
	As a resident, I want to be able to enter the		
RE-FU-01	mobile application with my username and	High	13
	password.		
	As a resident, I want to be able to see all the		
RE-FU-02	options offered by the application and the main	Normal	8
	page.		
DE 511 02	As a resident, I want to be able to consult my	Low	- ا
RE-FU-03	personal information.	Low	5
RE-FU-04	As a resident, I want to be able to edit my allowed	Low	20
NL-FU-U4	information.	LOW	20
RE-FU-05	As a resident, I want to see the current items	High	8
NE-FU-U3	pending payment.	nigii	٥
RE-FU-06	As a resident, I want to see the history of my	Low	13
KL-FU-00	payment items.	LOW	13
L		l	

RE-FU-07	As a resident, I want to see my active visitor invitations.	High	13
RE-FU-08	As a resident, I want to generate new invitations	High	8
RE-FU-09	As a resident, I want to edit active invitations.	Low	8
RE-FU-10	As a resident, I want to cancel active invitations.	Normal	13
RE-FU-11	As a resident, I want to see my visitor list.	Normal	8
RE-FU-12	As a resident, I want to add a new visitor.	Normal	5
RE-FU-13	As a resident, I want to see the detail of the visitors.	Low	3
RE-FU-14	As a resident, I want to edit the detail of the visitors.	Low	8
RE-FU-15	As a resident, I want to remove a visitor from my list.	Low	8
As a resident, I want to be notified when the RE-FU-16 visitor shows up at the sentry box of the urbanization.		High	5
RE-FU-17 As a resident, I want to be able to accept the visitor's income once it arrives.		High	8
RE-FU-18	As a resident, I want to have a communication channel with a sentry box.		5
RE-FU-19 As a resident, I want to see my comments and suggestions sent.		Low	5
RE-FU-20	As a resident, I want to be able to send new comments and suggestions.	Low	3
RE-FU-21	As a resident, I want to be able to see the administrator's response to my comments or suggestions.	Low	3
RE-FU-22	As a resident, I want to be able to log out.	High	2
PS-FU-01	As a Security Staff, I want to be able to enter the mobile application with my username and password.	High	3

PS-FU-02 As a security staff, I want to be able to see all the options offered by the application and the main page.		Normal	3
PS-FU-03 As a security staff, I want to see the list of villas.		High	5
PS-FU-04 As a security staff, I want to see the basic information about the villa.		Normal	8
PS-FU-05	As a security staff, I want to see the villas that are in "mora".	High	5
PS-FU-06	As a security staff, I want to see the active visits of the day.	High	5
PS-FU-07	As a security staff, I want to be able to enter the invitation code and verify the data	High	8
PS-FU-08	As a security staff, I want to inform the resident of the arrival of the visit to the sentry box.	High	5
PS-FU-09	As a security staff, I want to mark the entrance of the visit.	Normal	3
PS-FU-10	As a security staff, I want to mark the departure of the visit.	Low	3
PS-FU-11	As a security staff, I want to have a communication channel with the villas/residents.	Low	3
PS-FU-12	As a security staff, I want to log out.	High	1
PS-FU-13	As a Security Staff, I want to be able to see the residents per villa on a map so I can give directions to visitors.	Normal	20

Table 4.- User Stories Backlog

4.7. Dependencies

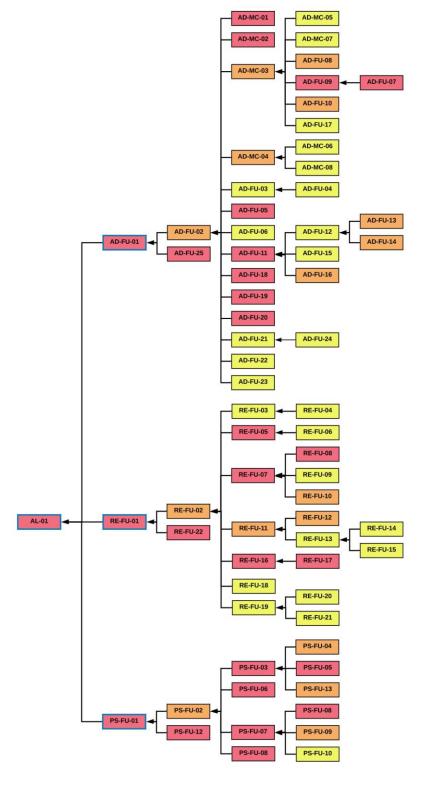


Figure 5. User stories dependencies

5. Project Control

5.1. Click Up

The task management platform of this project is "Click up", at the beginning of the project was "Asana" but in the free version of this isn't the link of dependencies between stories, for this reason, the team decided to change the platform.

The link to the project "Click up" environment is https://app.clickup.com/4208477/v/l/5-16514668-1?pr=10203943.

Environment Structure:

- Backlog
- Sprint 1
- Sprint 2
- Sprint 3
- Bugs
- Meetings
- Other Tasks

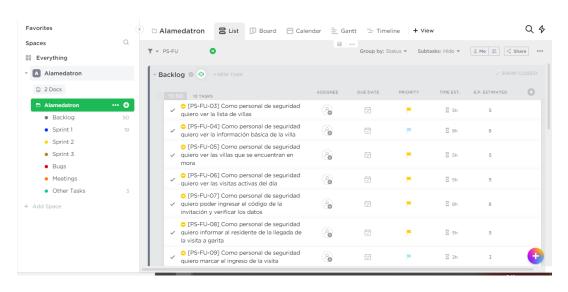


Figure 6.- Principal page of Click Up project.

Story Format:

- Code of Story
- Members Assigned

- Subtasks
- Dependencies
- GitHub Connection
- Time Estimated
- Comments



Figure 7. User story task in Click Up

An important characteristic of Click up is the Github connection, the members before start coding should link the repository and create the branch.

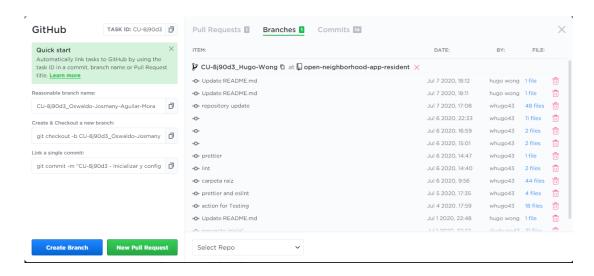


Figure 8. Github Connection to a tasks or subtask

Another important characteristic of Click Up is the time control of activities, with only a click a timer starts and helps report the developing time.

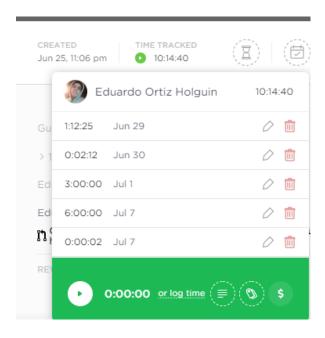


Figure 9. Time tracker of a task in Click up

Finally Click up have the option of document creation, which helps converge all information and also have a variety of views.

Use of time Report S1



Everyone immediately add the time spent on development using the following template.

Name	Start Time	End Time	User History	Comment
Osw	28-Jun 8:10PM	28-Jun 8:20PM	AL-00	Desing this Doc
leortiz	29-Jun 6:00 PM	29-Jun 7:30 PM	AL-00	Database

Figure 10.- Use of Time S1 Document in Click Up

5.2. GitHub

In this project in order to facilities the project control, the team created five repositories:

- Documentación: https://github.com/Oswagui/-Documentation-open-neighborhood-
- Web Frontend: https://github.com/Bernix01/open-neighborhood
- Web Backend: https://github.com/Bernix01/open-neighborhood-backend
- Security Staff Mobile App: https://github.com/Bernix01/open-neighborhood-app-security
- Resident Mobile App: https://github.com/Bernix01/open-neighborhood-app-resident

Additionally, the team follow a strict protocol of commits, branches, pull requests, and check:

- First, the member should be creating a branch of task with the link in Click up Platform.
- Code and Commits.
- Pull Request.
- Pass Tests and Code Stilling.
- Resolve Conflict.
- Assign a Reviewer.
- Check and comment.
- Accept the pull Request.

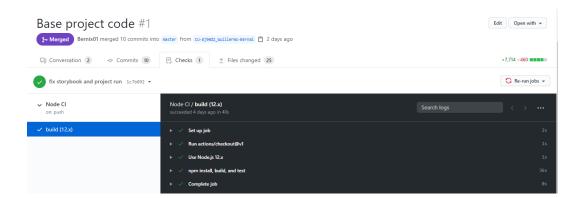


Figure 11.- Github Test and Accept

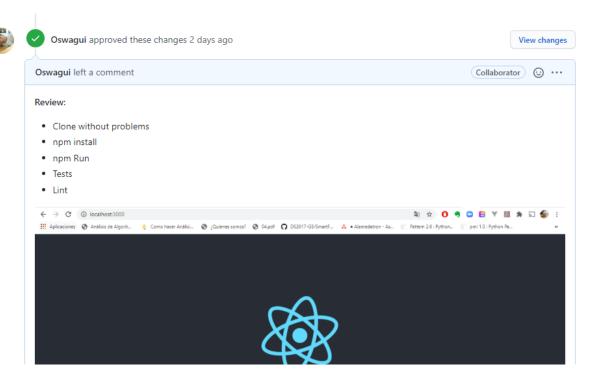


Figure 12. Github pull reviewer

5.3. Teams

The team has a private channel in course teams, in the files section, have a compilation of all documents of the project. Additionally, this platform is the meeting platform for the group.

5.4. Meetings Rules

The meetings are important in this project and are divided in the following types:

- Scrum Meetings.
- Teacher Guide Meetings.
- Bugs Resolution Meetings.
- Technology Explanation Meetings.
- · Other Meetings.

The rules are:

• Daily Scrum Meeting will be from Monday to Saturday at 7:30 pm.

- Is obligatory assist to Sprint Planification Meeting.
- The assistance of Daily Scrum Meeting is important but in case of a problem or member's inability to attend this, the member should advise Scrum master and send the answer to the Daily Scrum questions.
- The Bugs Resolution, Technology Explanation is optional but is obligatory to check the records of the meeting.
- In case the Scrum Master can't assist to a Meeting should assign a represent and host of the meeting.
- The meeting minutes will be in teams and "click up" platform, but the sign of these will be postponed to a future date.
- The tutor guide meetings will be in the subject class hour.
- The Scrum Master can schedule an Urgent Meeting with obligatory attendance of members-only in the case that the members will be notified with a day of anticipation.

6. Technology, Tools and implementation decisions

6.1. Overview

TECHNOLOGY/TOOL	USE
React Native and React.js	Mobile App Framework and JavaScript library.
React Hook	React API, Hooking techniques.
Graphql	Query Language in Client-Side
Graphql Hooks	Alternative API to Apollo Hooks in Client-Side
Django	Web framework in server-side
Django Graphene	Add Graphql functionality in Django Project
	Uikit, React-based framework that provides accessibility,
Grommet	modularity, responsiveness, and themes in a tidy
	package.
GitHub Actions	Build Automation
Airbnb	Coding Standard
EsLint	Enforcing coding standards
EsLint	Preemptive Error Detection
Jest	Test Cases frontend
Django Test Cases Graphene	Test Cases backend
Test Case	rest cases backeriu
Chrome DevTools	Profiling web
Android Studio profiling tool	Profiling apps
Django Roles	Roles Control Tool
graphql-jwt	Authentication Tool
Windows Server 2013	Server Operating System
PostgreSQL	Server DataBase

Table 5.- Overview of tools and technology in the project

6.2. React Native and React.js

The Scrum team decided to have **React Native** as the mobile application framework of the project and **React.js** was chosen as the **JavaScript** library to build the user interfaces for Alameda's Administrator.

The main reason for the decision to choose React Native and ReactJS is to reduce the learning load of development members and to facilitate collaborative work both on the web app and mobile app.

(Possible) Learning Curve

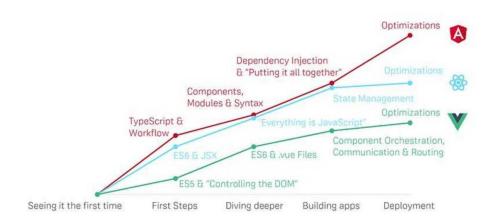


Figure 13.- Learning Curve - React, Angular and Vue

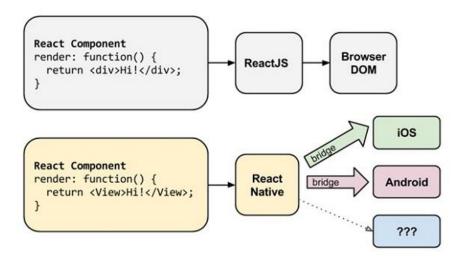


Figure 14.- Code Sharing between ReactJS and React Native

6.3. React Hook

The Scrum team decided to use the React API to implement the Hooking technique in the project.

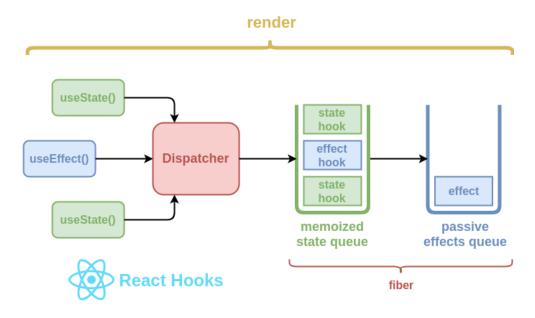


Figure 15. React Hooks

6.4. GraphQL

The Scrum team decided to have **GraphQL** as the query language in the Client Side. GraphQL provides a complete and understandable description of the data.

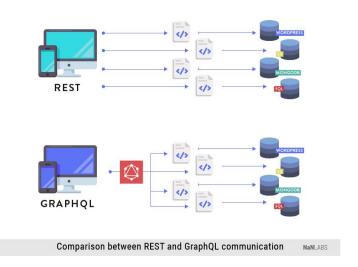


Figure 16. Comparison of Rest and GraphQL communication.

6.5. Django

The Scrum team decided to have **Django** as the web framework on the server-side. The main reason for the decision to choose Django and ReactJS is to reduce the learning time and facilitate the development thanks to the team's previous experience using Python and Django. Django follows the model-template-view (MVC) architectural pattern.

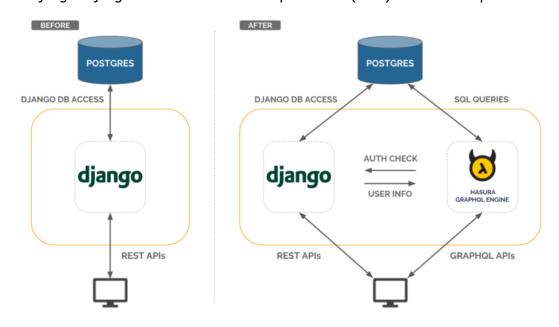


Figure 17. GraphQl and Django communication

6.6. Django Graphene

The Scrum team decided to have **Django Graphene** as GraphQL functionality in the Django Project.

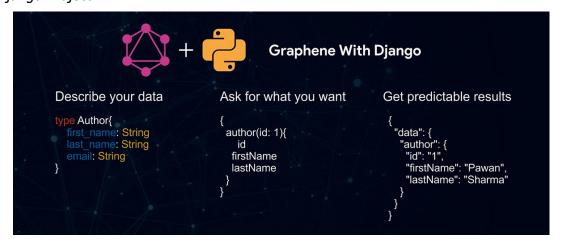


Figure 18. Django and Graphene

6.7. Grommet

The Scrum team decided to have **Grommet** as the React-based framework that provides accessibility, modularity, responsiveness, and theming in a tidy package. And the grommet designer to make the views.

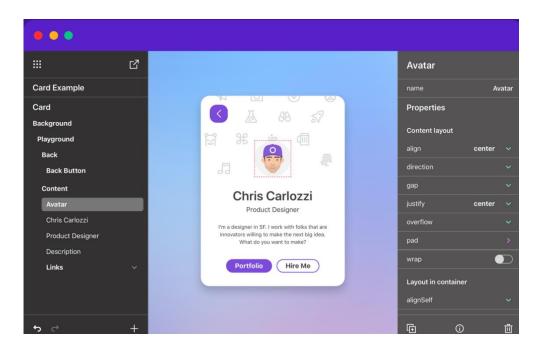


Figure 19. Grommet Designer

6.8. EsLint

The Scrum team decided to have **EsLint** as the tools for Enforcing coding standards and Preemptive Error Detection. The main reason to choose this tool is the facility of use.

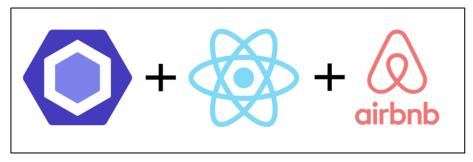


Figure 20. EsLint, React and Airbnb

Figure 21. EsLint example

6.9. Airbnb Style Guide

The Scrum team decided to have **Airbnb Style Guide** as the React style guide in the project. This style guide is mostly based on the standards that are currently prevalent in JavaScript, although some conventions (i.e async/await or static class fields) may still be included or prohibited on a case-by-case basis. Currently, anything prior to stage 3 is not included nor recommended in this guide.

Read the full guide in: https://github.com/airbnb/javascript/tree/master/react

Style Guide points:

- Basic Rules
- Class vs React.createClass vs stateless
- Mixins
- Naming
- Declaration
- Alignment
- Quotes
- Spacing
- Props
- Refs

- Parentheses
- Tags
- Methods
- Ordering
- isMounted

6.10. Jest

The Scrum team decided to have **Jest** as JavaScript testing framework It works with projects using: Babel, TypeScript, Node.js, React, Angular and Vue.js. It aims to work out of the box and config free.

```
PASS src/App.test.tsx (5.451s)
src/components/post.test.tsx (6.191s)

Test Suites: 2 passed, 2 total
Tests: 2 passed, 2 total
Snapshots: 0 total
Time: 10.933s, estimated 20s
Ran all test suites.

Watch Usage: Press w to show more.

C:\Users\computador\prueba\open-neighborhood>npm run lint

> open-neighborhood-v2@0.1.0 lint C:\Users\computador\prueba\open-neighborhood
> eslint --ext .js,.jsx,.ts,.tsx src --color
```

Figure 22. EsLint test

6.11. Chrome DevTools

The Scrum team decided to have **Chrome DevTools** as a Web app profiler. Is the easiest and the documentation is extensive.

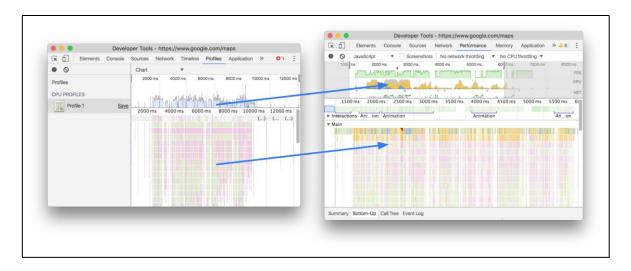


Figure 23. Chrome WebTools profiler

6.12. Android Profiler

The Scrum team decided to have **Android Profiler** as a Mobile app profiler. Is the easiest and the documentation is extensive.

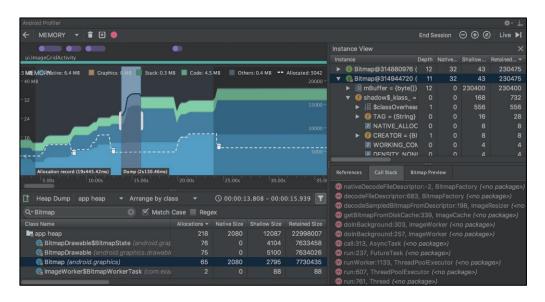


Figure 24. Android Profiler

6.13. Django Roles and GraphQL-JWT

The Scrum team decided to have **Django Roles** as the Roles Control tool and **GraphQL-JWT** as the Authentication tool.

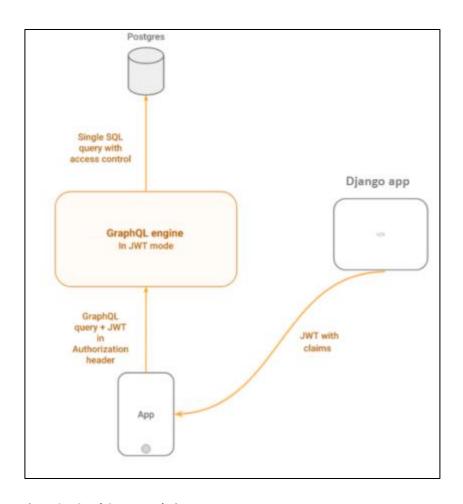


Figure 25. GraphQL JWT and Django

6.14. Windows Server 2003

The Client has $\boldsymbol{Windows}$ \boldsymbol{Server} 2003 as the operating system in the server.

6.15. PostgreSQL

The Client indicated the change of the database engine from SQL Server to **PostgreSQL**.

7. Pre-Sprint

7.1. Meetings

MEETING	DATE-TIME	TYPE
Asana migration	23/06/2020 09:33 PM	Optional
Teacher Guide 1	24/06/2020 02:45 PM	Feedback
Scrum Poker	26/06/2020 11:00 AM	Obligatory

Table 6.- Pre Sprint-Meetings

7.2. Considerations

- The meeting minutes are in Teams and Click-up.
- The first evidence of these meetings was in Asana but a time later the team migrate to Click-up.
- Redefinition, creation, and estimations of stories were in this period.

8. Sprint 1

8.1. Week 1

- Start of AL-00 story.
- Hard week, the team presents a lot of problems with the platforms and languages.
- Bad estimation of AL-00 story, the configuration, and the familiarization with the languages, frameworks, and tools require more time.
- Click up Migration.
- Define tools, frameworks and technology.
- Define Coding Standards.
- Start report of first partial.

8.2. Week 2

- End of AL-00 story.
- Check pull request of Web environment.
- Check pull request of Resident Mobile App environment.
- Check pull request of the Security Staff App environment.
- Definition of Profiling Tool.
- Continues report of first partial.

8.3. Week 3

- Continues report of first partial.
- Configuration of the user in the web server. (14/07/2020)
- Configuration of the web server.
- Learn Grommet.
- Start AD-FU-01, AD-FU-02.
- Add PostgreSQL to the project.
- First Partial Report.
- Github Documentation Repo.
- Early Sprint 1 Acceptance Act.

8.4. Meetings

MEETING	DATE-TIME	TYPE
Daily Scrum 1	29/06/2020 07:30 PM	Scrum
Daily Scrum 2	30/06/2020 07:30 PM	Scrum
Teacher Guide 2	01/07/2020 03:42 PM	Feedback
Daily Scrum 3	01/07/2020 07:30 PM	Scrum
Daily Scrum 4	02/07/2020 07:30 PM	Scrum
Daily Scrum 5	03/07/2020 07:30 PM	Scrum
Technology Meeting 1	04/07/2020 12:30 PM	Optional
Daily Scrum 6	04/07/2020 07:30 PM	Scrum

Daily Scrum 7	06/07/2020 07:30 PM	Scrum
Daily Scrum 9	08/07/2020 07:30 PM	Scrum
Daily Scrum 10	-	Scrum
Daily Scrum 11	-	Scrum
Daily Scrum 12	08/07/2020 07:30 PM	Scrum
Daily Scrum 13	13/07/2020 07:30 PM	Scrum
Daily Scrum 14	14/07/2020 07:30 PM	Scrum
Daily Scrum 15	15/07/2020 08:30 PM	Scrum

Table 7.- Sprint 1 Meetings

8.5. Client Acceptance

• See the full document in the Repository.