RARS Software Application

Team Koala

Presentation Objective

After reading through project background and conducted some research study, we established requirements elicitations to better understand the project's motivation and its requirements. 11 user stories are found, and a final solution is conducted based on it and presented as a digital prototype

Team Member

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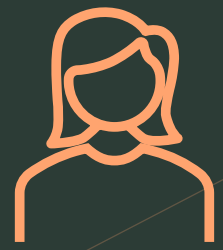


Yi Gao

Presentation Structure

01

Background Introduction

02

Projects and Requirements

03

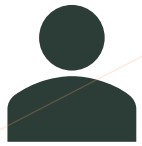
Solution

01

Background Introduction

This section will brief present: our Client, background of the project, project motivation.

Background Introduction



Client:
Brian Mcdermott

Radio Frequency
Interference (RFI)

Project Motivation: RFI,
Radio Communication

02

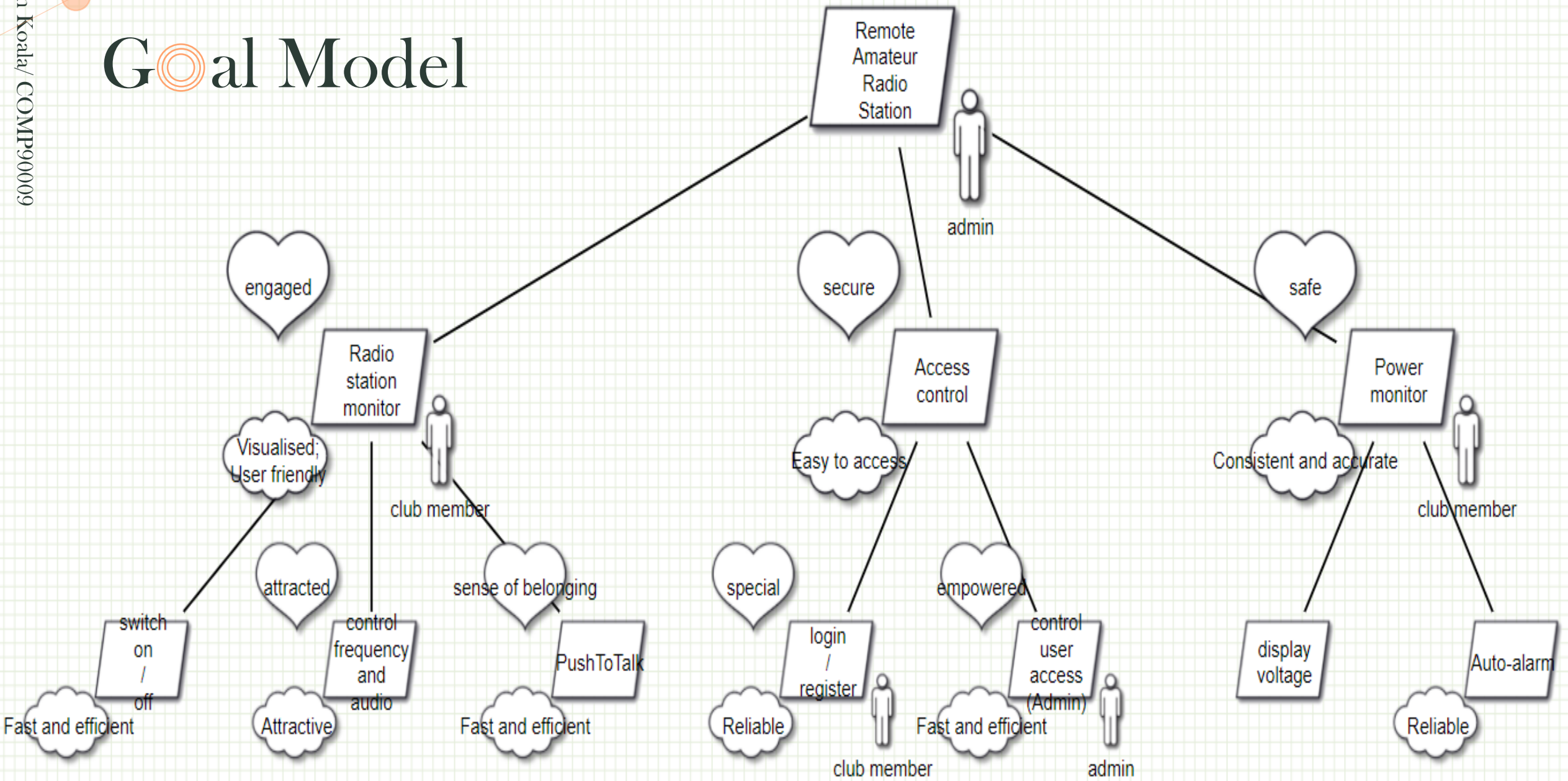
Projects and Requirements

This section will brief present: our projects, requirements for our projects, as well as the requirement analysis processes.

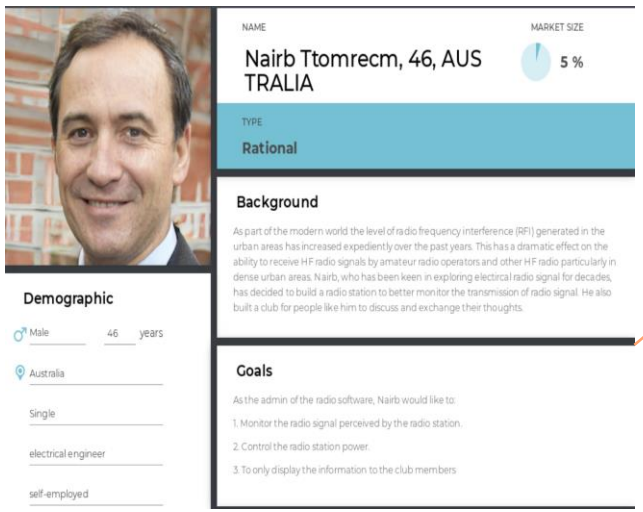
Requirement Analysis Process

Inception	Elicitation	Elaboration	Negotiation	Specification	validation
• Initialised client meeting and had a basic understanding of the project	• Engaged stakeholders to understand their goals -> goal model	• Refined requirements, developed personas and paper prototypes	• Reconciled conflicts through negotiation	• Finished specifications: documents, goal models, user stories, paper prototypes and digital prototypes	• Validated the quality of all software requirements

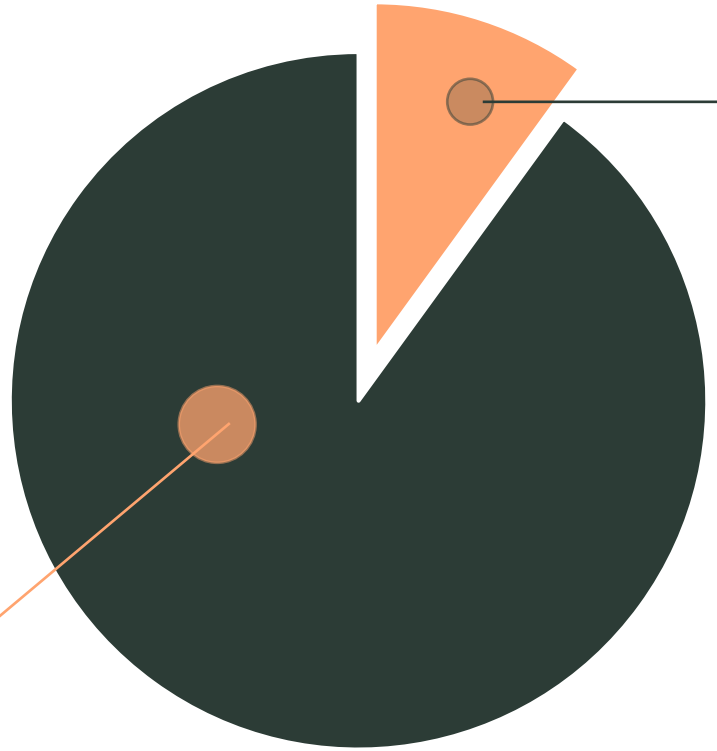
Goal Model


Remote Amateur Radio Station
admin
engaged
Radio station monitor
Visualised; User friendly
club member
attracted
sense of belonging
switch on / off
Fast and efficient
control frequency and audio
Attractive
PushToTalk
Fast and efficient
secure
Access control
Easy to access
special
empowered
login / register
Reliable
club member
control user access (Admin)
Fast and efficient
admin
safe
Power monitor
Consistent and accurate
club member
display voltage
Auto-alarm
Reliable

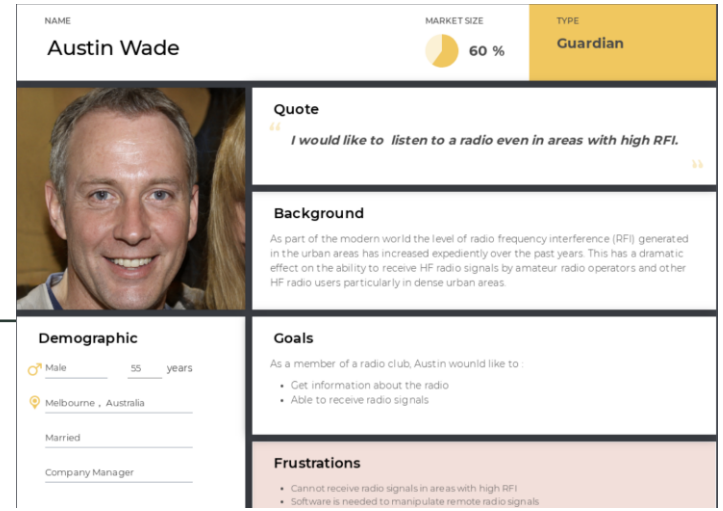
Personas



Usage



■ Admin ■ Normal User



User stories

Epic ID	Epic	User Story ID	As a <role>	I want to <do something>	So that <achieve some goals>	Priority	Size Estimation
1	Login/register	1	Admin	Create an account for my club member	They can use the accounts to login	M	Small
		2	Admin	Manage access of user account	I can detect/create the users accounts	M	Medium
		3	Admin/Club member	Login	I can start to use the system	M	Small
2	Manage the radio station	4	Admin	Edit my profile	I can update my information	C	Small
		5	Admin	Switch on/off radio station	I can close it at home	M	Small
3	Manage Auto-alarm system	6	Admin	Be alarmed when power is lower than threshold	I can perform safety actions	S	Medium
		7	Admin	Set an alarm threshold	I can be alarmed when power is lower than threshold	S	Small
4	Display voltage	8	Admin	See the voltage of the system	I can monitor the power level	M	Small
5	Display radio interface	9	Admin/Club member	Switch between different channels	I can listen to the channel I like	S	Medium
		10	Admin/Club member	Adjust the volume of the radio	I can listen to it at a suitable volume	S	Small
6	Push-to-Talk	11	Admin/Club member	Push a button and start to talk to others	I can communicate with other club members on a certain channel	S	Large

Acceptance test

Acceptance Criteria ID	Acceptance Criteria	Step	Acceptance Test	Critical		Test Result	
				Yes	No	Accept	Reject
1.1	Given I have logged in and on user page, When I find the user I want to delete and click the 'delete' button at the end of the user information, Then I can delete the user accounts to maintain security of the website.	1	Admin is at the home page.		✔	✔	
		2	Admin clicks the "User profile" button on the top bar.	✔		✔	
		3	The page is redirected to the user profile page.	✔		✔	
		4	Admin clicks the "Delete user" button in the middle.	✔		✔	
		5	The page is redirected to the user control page.	✔		✔	
		6	Click the delete icon to the right of the user you want to delete, then the user will be deleted from the database.	✔		✔	
1.2	Given I have logged in and on user page, When I want to add an user, I click the add button and input that user id of the user I want to add, Then I can add the user accounts to maintain security of the website.	1	Admin is at the home page.		✔		✔
		2	Admin clicks the "User profile" button on the top bar.	✔		✔	
		3	The page is redirected to the user profile page.	✔		✔	
		4	Admin clicks the "Add user" button in the middle.	✔		✔	
		5	A pop up window emerges with auto-generated id and password.	✔		✔	

03

Solution

This section will brief present: our solution as digital prototype.

Solution

Digital Prototypes

Thank you!

Presented by Team Koala