

Dash Warning

Group Name: **AutoTek**

Sub-Team: **TeamR**

Roisin McPhillips



Names & Roles

- ▶ **Name:** Roisin McPhillips
- ▶ **Roles:** Scrum Master, Frontend Developer, GitHub & Testing
- ▶ **Team Name:** AutoTek / **Sub-Team:** Team RA
- ▶ **Technical Specialism:** Frontend Development & GitHub
- ▶ **Scrumwise Link:**
<https://www.scrumwise.com/scrum/#/sprints/project/l8-sd4-2021-auto-tek/id-31429-70635-94>
- ▶ **Individual Mahara Page:**
<https://mahara.dkit.ie/view/view.php?t=y7hL5PAFSzb2O9w06ufa>
- ▶ **GitHub Link:**
<https://github.com/D00219161/DashWarningTeamRA.git>



Overview of The Application

- ▶ Dash Warning allows users to scan the symbols that appear on their vehicle's dashboard and displays what each symbol means. Apart from displaying what the symbols mean, it shows or recommends nearby repair shops in situations when a mechanic is needed using GPS location. The app will also recommend phone numbers to various roadside assistance personnel as the users request when they have broken down.
- ▶ Focus Group: People who drive Toyota & Volkswagen cars (new or old).
- ▶ Partnership: Mechanic located in Granard, County Longford, Ireland.

Requirements - Major Elements

Must Haves

- Scan the dashboard symbols
- Analyze the dashboard symbols
- Display symbols relative information
- Login account for managing user history

Should Haves

- Phone numbers for roadside repair services/assistance
- Most common error symbols displayed when device is offline & Sub pages
- Detect Fault Q&A to display back the type of fault
- Enter Details user input to detect fault quicker

User Persona



Sarah Cullen, 30

MARRIED Yes
KIDS 2
EDUCATION St. Pats Teaching
OCCUPATION Teacher
LOCATION Dublin

ANALYTICAL

CARING

INTELLIGENT

CAUTIOUS

Bio

Sahara is a 30 year old Car Enthusiast driving a 2021 Volkswagen Passat ST Line with only 40,000 km on it. As she is a teacher with small children she understands how important her car is but does not understand the majority of parts her car needs. As she is driving a big expensive car it is important she keeps the car regularly serviced and maintained as parts for Volkswagen tend to be expensive. With the use of the application she can learn more about car dashboard symbols and what the colour of each mean. She can also be recommended to good mechanics in cases of emergencies.

Technology

DESKTOP

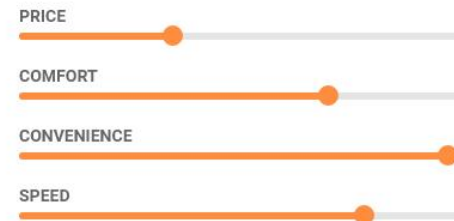
SMARTPHONE

SOCIAL MEDIA

Goals

- Tara's main goal is to learn more about cars and their faults with the app.
- She wants to understand what each warning symbol means as they appear on her dashboard.
- She also wants to learn how to fix a simple fault by herself to save money.
- She also wants to be notified of near by mechanic shops encase of a serious fault.

Motivations



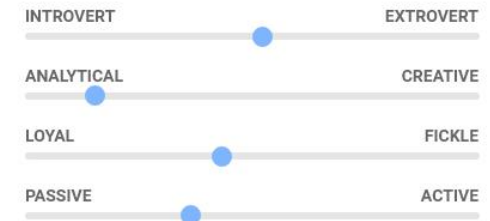
Brands She Likes



Interface Requirements

- To be able to access roadside assistance where necessary as she is a busy person.
- To be able to navigate through the app with ease.
- To receive relevant information about what the warning symbols mean that may appear on her dashboard.

Personality



Software & Apps



Home Display S...

Dash Warning

Welcome to Dash Warning

Login

Enter Details

Detect Fault

Dash Warning

Login To Your Account

Username

Password

Log On Cancel

Create Account

Create

Enter Details Scr...

Dash Warning

Enter Fault Details

Car Type - Make

Colour of Fault

Describe Fault

Time Detected

Location

Suggested Fault

Dash Warning

Detect Fault
Q&A Forum

Most Common Faults

Red Faults

Amber Faults

Green & Blue Faults

Roadside Assistance

Enter Details

Logout

Detect Fault Scr...

Dash Warning

Detect Fault Q&A

What Colour is the Fault?

Red Amber

Green / Blue

How many times
did it appear?

1 2 3 4

Did the fault produce
any sound?

Yes No

Offline Screen E...

Dash Warning

Most Common Faults

Dash Warning

Red Faults - Serious

Brake System Warning Light



The brake system warning light indicates a problem with the brake system. It could be caused by a low brake fluid level, a worn brake pad, or a problem with the brake master cylinder. It is important to check the brake fluid level and to have the brake system inspected by a qualified mechanic as soon as possible.

Is it safe to drive?

No. It is not safe to drive with the brake system warning light on. It could lead to a serious accident. The car should be stopped as soon as possible and the brake system should be inspected by a qualified mechanic.

What to do?

Check the brake fluid level and top it up if it is low. If the problem persists, have the brake system inspected by a qualified mechanic.

Battery Warning Light



The battery warning light indicates a problem with the battery or the charging system. It could be caused by a low battery level, a faulty alternator, or a problem with the battery cables. It is important to check the battery level and to have the charging system inspected by a qualified mechanic as soon as possible.

Is it safe to drive?

No. It is not safe to drive with the battery warning light on. It could lead to a serious accident. The car should be stopped as soon as possible and the battery or charging system should be inspected by a qualified mechanic.

Amber Faults

Dash Warning

Amber Faults - Most Common

Check Engine Light



The check engine light indicates a problem with the engine or the emission system. It could be caused by a faulty oxygen sensor, a faulty mass air flow sensor, or a problem with the engine itself. It is important to have the engine and emission system inspected by a qualified mechanic as soon as possible.

Is it safe to drive?

Yes. It is safe to drive with the check engine light on, but it is important to have the engine and emission system inspected by a qualified mechanic as soon as possible.

What to do?

Have the engine and emission system inspected by a qualified mechanic.

Traction-control Warning Light



The traction-control warning light indicates a problem with the traction-control system. It could be caused by a faulty wheel speed sensor, a problem with the traction-control system, or a problem with the brake system. It is important to have the traction-control system inspected by a qualified mechanic as soon as possible.

Is it safe to drive?

Yes. It is safe to drive with the traction-control warning light on, but it is important to have the traction-control system inspected by a qualified mechanic as soon as possible.

Dash Warning

Green & Blue Faults

High or Low Beam Indicators

The high or low beam indicator light indicates a problem with the high or low beam indicator. It could be caused by a faulty bulb, a problem with the indicator switch, or a problem with the indicator wiring. It is important to check the bulb and to have the indicator switch and wiring inspected by a qualified mechanic as soon as possible.

Is it safe to drive?

Yes. It is safe to drive with the high or low beam indicator light on, but it is important to have the indicator switch and wiring inspected by a qualified mechanic as soon as possible.

Automatic Headlight Dimmers



The automatic headlight dimmer system is designed to automatically dim the high beams when the low beams are on. It is important to have the system inspected by a qualified mechanic as soon as possible.

Is it safe to drive?

Yes. It is safe to drive with the automatic headlight dimmer system, but it is important to have the system inspected by a qualified mechanic as soon as possible.

Service Screen

Dash Warning

Roadside Assistance

AA Roadside Assistance
0818 66 77 88

Police Service Number
112 or 999

Fire Service Number
112 or 999

Ambulance Service
Number
112 or 999

Irish Towing Service
01 429 8482

UI Prototype Testing

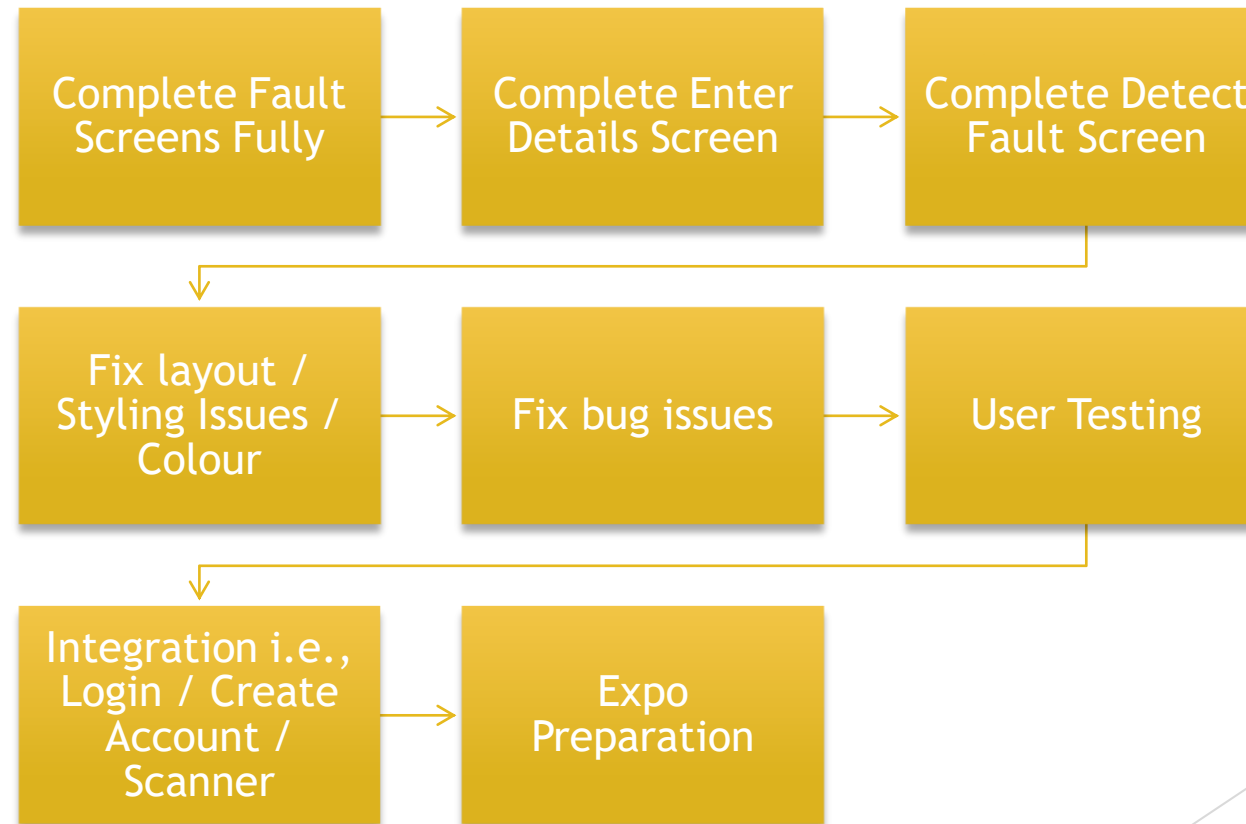
Dash Warning App Paper Prototype Testing (UI) – Paper Prototype (Adobe XD)

Test ID	Test Title	Details/Actions/Inputs	Expected Outcome	Actual Outcome	Result	Comment
1	Open App (Home Page - Welcome)	The user opens the Dash Warning App on their phone.	Land on Home page of app.	User lands on the home page (welcome page) of app.	PASS	Home page loads Successfully.
2	Login Button	Enters valid login details.	Moves to the User Account Page.	Moves to the User Account Page.	PASS	User account page loads Successfully.
3	Login Button	Enters invalid login details.	Stays on the login page.	Stays on the login page.	PASS	Error message stating invalid login made – try again.

Progress & Issues

- ▶ Home Page
- ▶ Login Page (Integration)
- ▶ Navbar Implemented
- ▶ Roadside Assistance Page
- ▶ Most Common Faults
- ▶ Fault Sub Pages Half Completed
- ▶ Detect Fault & Enter Details Half Implemented
- ▶ Development Slower than expected
- ▶ Some elements harder to implement i.e., Forum Input & Images - taking longer
- ▶ Time (2 weeks lost)
- ▶ Underestimating complexity of features - Images / Input Forum

Targets & Features T-CA4 (Final Release)



Release 2 Demo
