Arabic Learner Driver App Project Handover Document

Deakin University

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Project Client

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Project Team

[Web Development tribe, Rosemary squad]

Student Id	Student Name	Role
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1. Document Purpose

This document records the transfer of all the information and artefacts produced during the course of this project in the first phase. The handover document and delivery package include the following:

- Project Management Plan:
  The Project Management Plan documents detailed information on the project background, purpose of the project, core idea, requirements, functionalities, deliverables, development methodology, tools and techniques. It defines how the project was planned to be executed, monitored and controlled.

- Sprint 1 report
  The Sprint 1 report summarizes the planned activities, activities that were completed, activities that were not completed, project metrics, schedule for sprint 2, customer demo, evaluation and supervisor feedback and recommendations for future.

- Sprint 1 presentation
  The Sprint 1 presentation includes slides that were used during our Sprint 1 presentation. It shows our progress till Sprint 1 and our plan for Sprint 2.

- Sprint 2 report
  The Sprint 2 report summarizes the planned activities, activities that were completed, activities that were not completed, project metrics, schedule for sprint 2, customer demo, evaluation and supervisor feedback and recommendations for future.

- Source code
  The source code is stored in the bitbucket. The source code contains a template.html page which is to be used as a baseline while developing other webpages for the website.

- Research folder
  The research folder contains information on the various translation tools.

- UI design:
  The UI design prototype was created using AdobeXD before the actual development of website started. There are 4 UI designs out of which one was selected as the final UI design as per the client's decision.
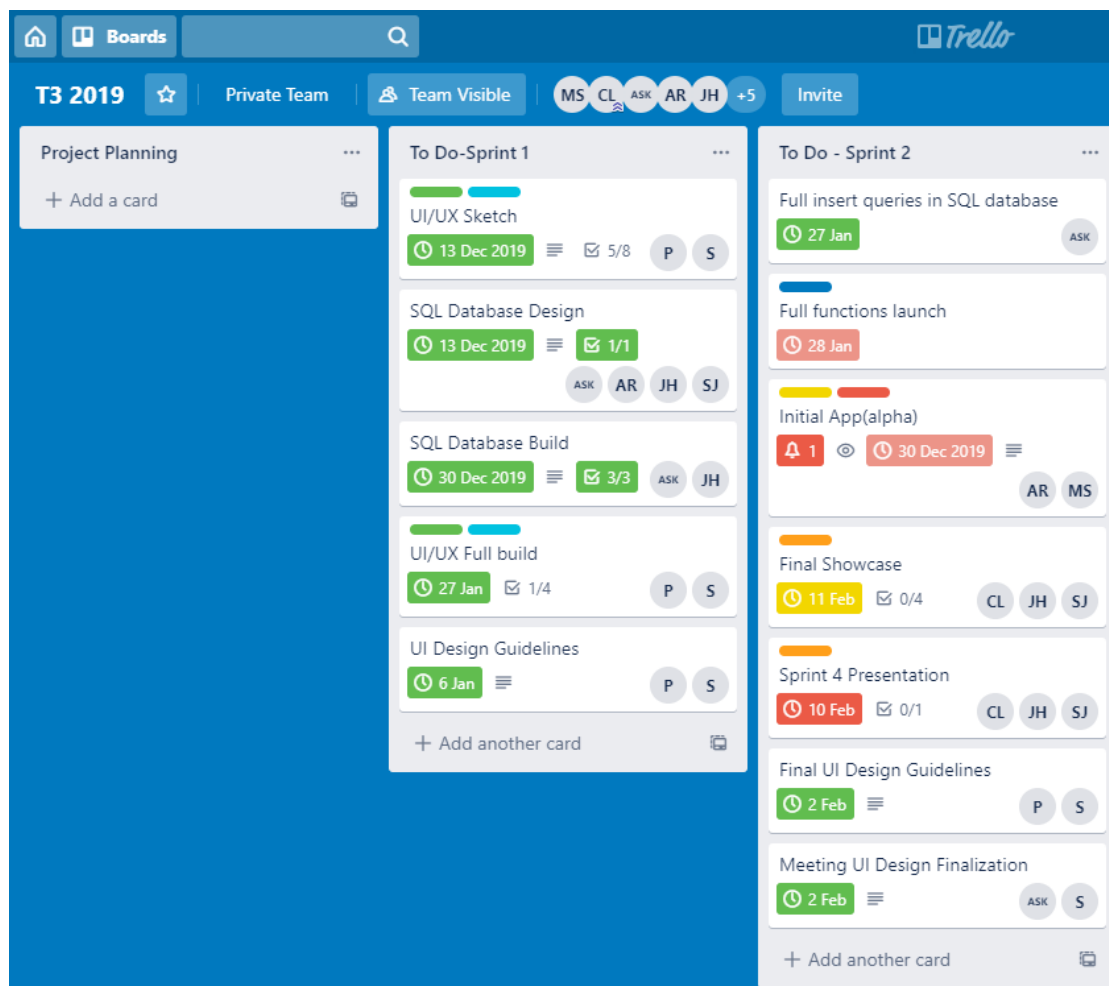
2. Project Description

This project aims to create an application, both a web app and a mobile app, that can be used by helping CALD (Culturally and Linguistically Diverse) background learners to practice and pass the driving test at reduced costs. This project also exists to then offer several work opportunities for those who successfully pass the test and acquire their driver's licenses as instructors. The target of this project is low-income refugees, asylum seekers and the general public.

The project was originally supposed to be a mobile app, but a web version was added to prevent problems when mobiles update, and the app would experience problems. The application itself is intended to have practice tests, user accounts, subscriptions, multiple well translated languages that can be switched at any time, feedback options and possible work opportunities for users through Drivers Ed.

3. Business Features

We are creating a web/mobile app with the current focus on Arabic learner drivers, the client wanted a simple and easy to use interface with good translations for each language implemented as well as a way to switch between them. The client wanted practice questions for users which is to be implemented in the two formats available on VicRoads, test mode and feedback mode.

Feature	Description	Sprint	Status
UI/UX Design and Style Guide	Documentation and Adobe XD designs for the appearance of the web app for both desktop and mobile devices.	1	Completed
SQL Database Design	Documentation and design of how the database tables will be structured.	1	Completed
SQL Database Build	Complete database structure built, ready for import of data.	1	Completed
Additional Translations	Translate any words needed for current project progress and search for reliable translation tools.	2	In progress
Questions stored in Database	Import all quiz data so it is ready for the website to pull and display accordingly.	2	Completed
UI Build	Development of all pages, including both desktop and mobile versions.	2	In progress
Pull questions from database	This feature involves the use of PHP & JavaScript functionality which pulls question data from the server, then outputs as an object that is mapped to HTML for the user to see as a question with multiple options to choose from.	2	Completed
Next question button	A button under the question, which when clicked will take the user to the next question.	2	Completed
Randomize questions	Logic that randomizes the question that is pulled from the database to ensure the quiz will not be the same each run through.	2	Completed
Language selector	Select element which allows user to switch between Arabic and English. Using JavaScript, it will switch page text based on the language chosen. As requested by client, this is a manual	2	Completed

	translation integration, and cannot use any translation tools.		
Save language preference	A cookie which saves the users selection of the language, so that it does not reset from page to page.	2	Completed

4. Planned work

Feature	Description
Full UI build	Development of all pages, including both desktop and mobile versions. Outstanding tasks include creating Lessons page, finalising Contact us page and creation of mobile version.
Feedback & practice modes	Two modes which the user can take the test in. Feedback mode will display the answer for each question answered as you go along. Practice mode will not show progress until the end of the test.
Quiz validation	Functionality that checks the selection made by the user, then identifies if it is the correct choice or not. Also will check to see if an option has been chosen. If an option hasn't been chosen, a message will notify user and will not progress further.
Save quiz progress	An additional cookie which stores the progress and results of a user completing the quiz. This would be used to show the user their results after completion.
Align Arabic text to right	When switching languages, Arabic text is still left-aligned. Functionality is needed to align Arabic text to the right when viewing page in Arabic.
Extend language translations to all pages	Extension of current language switching functionality to translate all pages and page content.
Additional Translations	Receive professionally sourced Arabic translations from client for page content, such as menu text and page content.
User accounts	User accounts where you can log in/log out and have saved progress against specific account, enabling you to view history. This will involve additional database development and functionality.

Paid subscription model	A paid subscription model which will be tied into user accounts.
Permanent hosting options	Working with the client to establish a permanent hosting location during development and deployment.
Additional languages	The addition of more translations to increase the reach and capabilities of the app.
Offering offline access to the quiz functionality on mobile	The ability for the learner app to work offline, potentially requiring a native application that is downloaded from the app store.

5. Open issues

Punctuality:
The team struggled to get together on time for meeting and group discussions.

Teamwork:
The team was split mostly between seniors and juniors with both not spending a lot of time working together as well as splits within said groups leading to work being done in a more patch work fashion between members.

Communication:
With lacking teamwork the team did not communicate much slowing work to a degree as team members were not openly discussing work with the whole group.

Effort:
Some team members throughout the development phase have struggled to put together work.

Initiative:
Some team members have struggled to take initiative to complete their assigned work in a timely manner without the guidance of other team members.

6. Lessons Learned

Task breakdown:
Throughout the project it became clear that the bigger tasks needed to be broken down into smaller goals within the task to have a better idea of what has been done, what needs to be done and to have a more definitive standard of when the task can be classified as complete.

Work allocation:
Tasks would usually be completed faster if team members were properly allocated what section to do within the tasks that were assigned to them, as this would break down bigger tasks and take less time from team members so they could complete other work.

Trello:

Trello was underutilised during development and stunted progress, moving forward tasks need to be put into Trello and then broken down into smaller tasks and then have team members assigned and updated as tasks are completed.

Frequent meetings:
The team operated better when members would regularly get together and do work in a group, with team members to bounce ideas off of and to give advice and present idea of where to go with development moving forward in the project

7. High-level architecture of the product
For full functionality the website uses HTML, JavaScript and PHP. The website is coded in HTML and features such as the language selector use JavaScript to change matching words with their translations, this feature is currently rolled out on all pages although it does not fully translate pages yet as there are not translation for all words used on the website. The practice questions section utilises PHP to pull questions from the database, these questions are pulled at random from the database and presented to the user putting the questions in a radio format using a combination of PHP and HTML code.

8. Source code
Hosted website:
Index: http://www.arabicdriverlearnerapp.epizy.com/index.html
Quiz: http://www.arabicdriverlearnerapp.epizy.com/practice.php

Source code:
https://bitbucket.org/arabicdiverlearnerappwcc/arabic-driver-learner-app/src/master/
Source code is also located within handover files, in folder Source Code. Please note there is limited functionality when running source files locally, as PHP is executed server-side.

Database components:
Please refer to file 'DatabaseExport02022020.sql' in Database backup folder, which contains the full structure and components of the database.

9. User manual
How to Run the Application:
1. Prerequisites:
- A connection to the internet.
- An internet browser.
2. Instructions for use
Upon reaching the homepage there are three current pages available to navigate to.
- Clicking on the Practice tab on the top of the website will navigate to the Practice page will allow the user to do practice questions which will present multiple choice questions, to progress the user will select one of the radio options and press next question.
- Clicking on the Contact Us tab will take the user to the Contact Us page, to submit a query the website requires users to enter their name, email address and to add a message after doing so they can submit their query.

- Clicking on the About tab at the top of the page takes the user to the About page which gives users information on Drivers Ed and Whittlesea community connections and informs users on the purpose and aim of the website.

There is also a language selection option

- To select the language, click the arrow on the dropdown bar on the upper right of the page and select either English or Arabic to select the language of the page on the fly.

10. Other relevant documents

Please refer to the Documentation folder, which contains UI design, Database design, guideline documentation and research material.

11. Appendices

Appendix 1. https://teams.microsoft.com/l/file/BD88776A-03E9-4BCB-9363-7EA6A0D9D165?tenantId=d02378ec-1688-46d5-8540-1c28b5f470f6&fileType=pptx&objectUrl=https%3A%2F%2Fdeakin365.sharepoint.com%2Fsites%2FUG-WebDevelopmentTribe%2FShared%20Documents%2FRolando%20Squad%2FT3%202019%2FSIT374%20Sprint%201%20%26%202%2FSIT374%20Sprint%201%20Presentation.pptx&baseUrl=https%3A%2F%2Fdeakin365.sharepoint.com%2Fsites%2FUG-WebDevelopmentTribe&serviceName=teams&threadId=19:30c89d79f0a2464aa9628b9402be4f9c@thread.skype&groupId=6c7c347d-d7ca-47c1-aac1-967d5e8c3e9a