DESIGN DOCUMENTATION

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myDrive:
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Author:	**Samir Adrik,** *Technical coordinator* *Full-Stack developer*
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Abstract: This document describes the requirements for the first *working product*, i.e. minimum viable product (MVP) for the myDrive project to be delivered 1st. February 2021.

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Verfied by	Asso Rostampoor, Mohammed Usman	Full-Stack developer(s)	28/12/2020	
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myDrive-12-D20.1	myDrive: Software Release Plan

Contents

1 Introduction

1.1 Objectives of this document

This document describes the proposed requirements for the first *working product*, i.e. minimum viable product (MVP) for the myDrive project. This is to be delivered on the 1st. February 2021 (hereby called the "first due date"). This document also includes requirements that will become part of the application, but that will not be implemented as a part of the MVP for the first due date.

1.2 Application area

This document concerns the technical coordination of the software design for the myDrive project. It has a consequence on the manner in which the software of the project is produced, integrated and tested by future users and stakeholders.

1.3 Applicable and reference resources

Reference resources

- myDrive Central Github Repository - `https://github.com/seemir/myDrive`;

- Official Slack workplace for the myDrive project
  - `https://app.slack.com/client/T01A0N5PDAL`;

1.4   Document amendment procedure

Readers are invited to send comments on the myDrive slack project to the author who will consolidate all feedback and produce updated versions of the document when significant changes are made.

1.5   Terminology

Definitions:

- myDrive - Project for the introduction of a Customer-driven logistics platform primary to be used in the transportation of goods and services market in Pakistan;

1.5.1   Glossary

- Github - Version control (also known as revision control, source control, or source code management) systems responsible for managing changes to the myDrive app;

- Slack - Business communication platform used by the myDrive team to communicate changes, news, updates and any questions or feedback;

2   Requirements

2.1   Minimum viable product (MVP)

A minimum viable product (MVP) is a version of the myDrive application which includes the features that will allow to release the product to a small group of test users by solving the core problem for these sets of users. The purpose is to provide immediate value, quickly, while minimizing development costs.

A common misconception is that an MVP consists of the minimum set of features deemed necessary for a working software product, with the goal of bringing it to market quickly. This misses the mark on several levels, most notably in the over-emphasis on speedy delivery and time to market, as opposed to focusing on customer and market acceptance. Indeed, rapid development is of essence, but only to the extent that learning and research objectives can be obtained quickly. Accordingly, some of the noted purposes of an MVP below begin to open up a more significant discussion:

- Be able to test a product hypothesis with minimal resources

- Accelerate learning

- Reduce wasted engineering hours

- Get the product to early customers as soon as possible

Accordingly, in terms of the myDrive application the MVP serves as a common ground to reach agreement on the implementation of the requirements left for the final version of the application. All the source code related to the myDrive application is to be published and accessed through the myDrive Central Github Repository.

In the preceding subsection (section 2.2), an overall workflow in the MVP is presented which provide the software developers the information they need to set up the myDrive working product. A list of future requirements are also presented in subsection 2.3. We need to emphasize that the requirements listed in subsection 2.3 are not included as they fall outside the scope of this MVP.

2.2 Overall workflow

A decision was made to create a simple MVP in order to make it easier for users and potential business partners to understand, download and test the myDrive application for the transportation of goods in the goods markets of Pakistan. The overall workflow of the myDrive application is created by the project and can be used by users and all stakeholders to get an overview and supply feedback to the development team to solve their specific issues. It can also be used by any who are interested in details about the myDrive project.

The myDrive application contain a number of views (`screens`) which the project has agreed to be included in the MVP. The overall workflow includes the following `screens`:

- `SplashScreen`: This is the landing page that links to the `WelcomeScreen`;

- `WelomeScreen`: Contains buttons that allow the user to choose to either `Login` directly or to `SignUp` and create an account;

- `LanguageScreen`: As it is assumed that users may not speak English, this `screen` will allow the users to select between the two default languages in the application, i.e. English or Urdu;

- `LoginScreen`: The users use this `screen` to login with the default method, i.e. email. This assumes that the user already has an account in the application;

- `SignUpScreen`: Should the user not have an account, this can be created in this `screen`. The sign up can be done with one of three methods, i.e. Google, Facebook or by phone;

- `SelectionScreen`; When creating an account the users are asked to choose to be a customer or driver. This selection is done in this `screeen`;

- `HomeScreen (reDirect)`; This `screen` is not a physical view, but rather based on the role that the account is associated with, i.e. driver or customer this `screen` re-directs the users to one of the two screens preceding `screens`;

- `DriverScreen`: This `screen` is reserved for users with driver account. As a minimum this `screen` should include a list of all the open possible orders (`ListOfOrders`) that the driver can choose to pursue;

- `CustomerScreen`: Assuming that the user is sign-in as an customer, this screen allows the users to select `From`, `To` and the `SizeOfObject` that they which to transport;

The overall workflow is illustrated in Figure 2.1.

2.3   Future requirements

As part of discussions within the project team, a list of possible future features is attached below. It needs to be emphasized that this part of the document is an evolving part, i.e. team members are recommended to contact the author whenever new or changes to future requirements are introduced.

- **Cost-effective zones**: This future requirement involves showing drivers recommended areas that are more cost-effective, i.e. areas with high demand, but without sufficient number of drivers to satisfy the demand.

- **Drill-down areas**: In addition for drivers and customers to select district polygons in map. It should be possible to select sub-districts as a way to "drill-down" areas in order to specify a trip more accurately. This is done as full address information may not be available at all times and for all users.

- **Dynamic pricing**: This requirement includes the possibility to set prices of a trip based on the supply and demand, i.e. high demand should transfer to higher prices and vice-versa. This is done to incentive driver to use the myDrive platform.
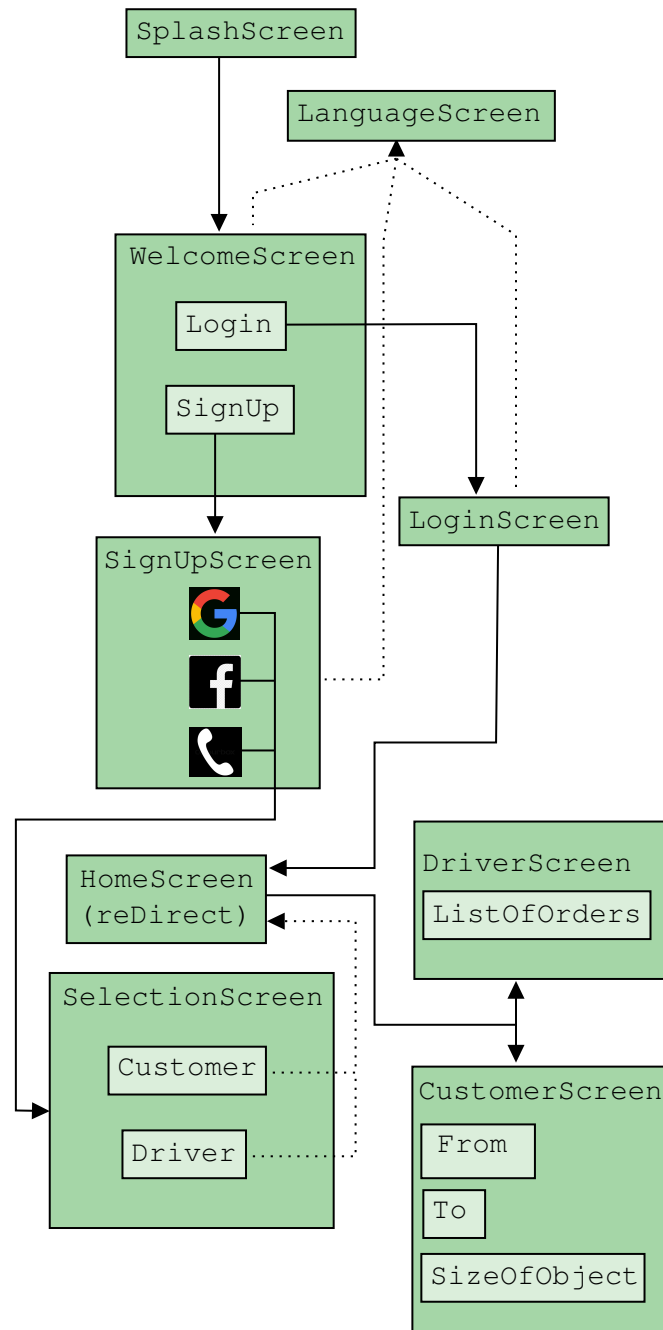
Figure 2.1: Overall workflow