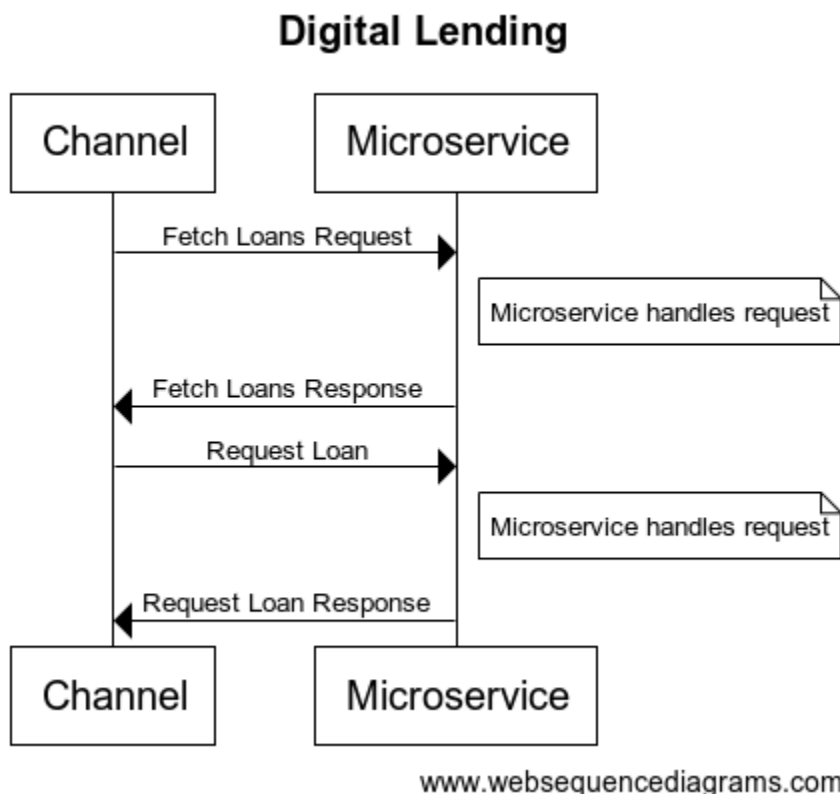# Digital Lending

DESIGN DOCUMENT

Preface

This document contains the design details for developing a digital lending system. It is intended for the design and development of the solution.

1. Overview

The client has a requirement to enable customers to access digital loan services.

2. Solution Sequence

Digital Lending

Channel	Microservice

Fetch Loans Request →

Microservice handles request

← Fetch Loans Response

Request Loan →

Microservice handles request

← Request Loan Response

Channel	Microservice

www.websequencediagrams.com

a. Business rules
- The client should be able to view available types of loans
- The user should be able to apply for loans they are eligible

b. System rules
- The solution should allow for viewing and application of loans

3. MVCS Design Pattern

This solution uses the MVCS design pattern.

The application consists of a data model/layer, presentation information, and control information.

- The **Model** contains the application data, it contains no logic describing how to present the data to a user. This consists of the Database entities and repositories

- The **View** presents the model's data to the user. The view knows how to access the model's data, but it is not interested in what this data means or what the user can do to manipulate it. This is represented by the API response back to the user which can be displayed to the user on a GUI.

- The **Controller** exists between the view and the model. It listens to events triggered by the api call and executes the appropriate reaction to these events. In most cases, the reaction is to call a method on the model service layer.

- The **Service** sits controller and the model, to encapsulate all the business logic that could be in the controller

4. Assumptions

- The lending institution has enough KYC information for the customer
- The lending institution has taken into account the customer's credit score and loan repayment history
- The lending institution offers enough information to the customers in regards to the facilities offered.
- The lending institution is providing Terms and Conditions governing the digital lending service and the customers have accepted the same