## Objective

Develop an online Loan Application Processing System (LAPS), for a home finance provider.

## Abstract of the project

This project is aimed at developing an online Loan Application Processing System (LAPS), for a home finance provider, which is used bycustomers to apply for loan and by the **l**oan **a**pproval **d**epartment (lad) for processing loan. This is a web based application that can be accessed throughout the web. This system can be used by the customers to search a suitable loan program offered by the home finance provider without any login and fill up the loan application form, administration staff can add/update/delete any loan program that the home finance provider offers/updates/cancels. Members of **l**oan **a**pproval **d**epartment (lad) have the responsibility to verify information provided by the customer and take a decision on the approval of loan in consultation with concerned approvers. There are features like report generators etc in this system.

## Functional components of the project

Following is a list of functionalities of the system. Wherever, the description of functionality is not adequate; you can make appropriate assumptions and proceed.

There are three categories of people who would access the system viz. customers (loan applicants), members of **l**oan **a**pproval **d**epartment (lad) and administrators. Each one of them would have some exclusive privileges (for e.g. Customers can apply for a program by filling up the online form without any login process, members of **l**oan **a**pproval **d**epartment (lad) alone will be able to view loan applications, approve or reject the application for a specific loan program. Only the administrator has the right to keep track of the home finance provider’s loan program details.)

1. Customers should be able to
   * View all loan programs offered by the home finance provider
   * Apply online for a loan program offered by the home finance provider, by filling up the application form that auto generates the application ID
   * View the application status of application, based on the application ID
2. The member of **l**oan **a**pproval **d**epartment (lad) should be able to :
   * Login into the system using his/her credentials.
   * View all loan programs offered by the home finance provider
   * View loan applications for a specific loan program.
   * Accept/Reject an application on the basis of the details of the loan applicant. If loan application is acceptable, loan application status is changed to ‘Accepted’, the scheduled date for an interview (of the loan applicant for verification of applicant’s documents, before approving the applicant’s loan under the mentioned loan program) is filled into the application form.
   * After the interview, the status of the loan application is changed to Approved/Rejected
3. The administrators should be able to
   * login to the system using his/her credentials
   * Update and manage (add or delete) information of the loan programs offer by the home finance provider
   * Generate various reports like:
     + View List of loan applications approved/accepted (waiting for interview)/rejected for a loan program.
     + View all loan programs offered by the home finance provider

Transition of Status: Applied ->Accepted/Rejected->Approved/Rejected

**Suggested Stack:**

1. **JAVA Track:**

* Java 8
* Angular 6+
* Maven
* Spring Boot 2.x
* SpringREST
* Spring Data JPA
* Postman
* Oracle/Postgres
* JUnit 5/Mockito
* Sonarqube
* JACOCO

1. **.NET Track**

* C#
* Asp.net
* EntityFramework
* Angular 6+
* MSBuild, MSTest/NUnit,
* SQL/MySQL/Oracle/Postgres