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| **Tech Spec – Credit Card** | |
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| **Related documents** | | | | |
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|  |  | | CBBL\_Credit Card\_Application\_eLoan & Web\_Field\_Draft1.3\_20210729.xlsx | Check this for field list of Web (CSE-Branch), Web (CARD Division), Web (CRM Approval) view |
|  | |  | Role-Action-StateTransaction-27072021.xlsx | Check this for who will able to do what on which state of application |
|  | |  | Table-Maping.xlsx | Check this for DB structure |

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# Overview

A credit card is a thin rectangular piece of plastic or metal issued by a bank or financial services company, that allows cardholders to borrow funds with which to pay for goods and services with merchants that accept cards for payment. Credit cards impose the condition that cardholders pay back the borrowed money, plus any applicable interest, as well as any additional agreed-upon charges, either in full by the billing date or over time.

There is a process for every Bank to provided credit card. Now CBBL wants to build a module in existing LMS system to procedure credit card work online.

# Solution 1

1. On LMS GUI there will be a icon called “Credit Card” and on that icon click Credit card window will open let’s call this window “credit-card-main-window”.

2. credit-card-main-window will be divider into 2 section.

a. Right section:

i. Upper part of right section will contain a search bar where user will able to search existing credit-card application, let’s call this “credit-card-search-bar”.  
ii. lower part of right section will contain a grid where we will show search result, let’s call this “credit-card-result-grid”.

And by double clicking on any item of this grid a new window will open to show details data of that credit-card application, let’s call this “credit-card-application-details”.

b. Left section: Left section is “Credit Card Menu” which will show

i. Status: this will show credit-card-result-grid data group by status. By clicking on a “STATUS\_NAME” credit-card-result-grid will show only that status’s credit-card application.

ii. Create new credit card: Here we will show all available type of credit card name and by clicking on that name a window will open to create new credit-card application, let’s call it “new-credit-card-creation-window”.

3. new-credit-card-creation-window:

a. On top of this window there will a search bar to search customer, let’s call this “customer-search-bar”. Customer search will be like customer search of LMS. Actually we are going to use same API to search customer, same DB table. After searching customer, customer information will be filled in below fields.

b. And below we will show fields as shown in “Web (CSE-Branch)” tab in “CBBL\_Credit Card\_Application\_eLoan & Web\_Field\_v1.0.0\_20210614.xlsx” file. File could be found in dac-drive.

c. At very down of this window there will be a “Save” button and by clicking this button we will create a new credit card application and we will call this state of credit-card application as “FO\_CREATED”, FO = Field Originator.

And for which field data will go in which table, check field to DB map doc.

4. card-application-details:

This view will be as per who is login, there will be 3 views in system

1. Web (CSE-Branch) view

2. Web (CARD Division) view

3. Web (CRM Approval) view

We will fetch data from DB and show on associated field. User will able to update, recommend to next level, return to lower level based on access.

On code, initially all field will be hidden, we will show fields as per view, this will increase manageability.

How to achieve Feature wise

Pre-Requirement:

1. All type off user and role should be in DB. Like, card officer, field originator.

2. All state transaction should be defined in DB as type marked “CREDIT\_CARD”.

4. Card type will be configured in DB.

5. Interest rate will be configurable depending on customer type and card type(Admin panel).

6. Document list will be configurable depending on customer type and card type(Admin panel).

FE-1: Card Module-CBS Integration (Data fetching)

FE-2: Customer Data Capture/fetch and save/update

This is for customer data search. We will use existing system for customer search.

Existing Table of DB, if necessary some fields which is extra in field list of credit-card will be added into customer table.

Existing system of customer search:

a. Every time on customer search from GUI we do not check in DB first, we pull data from IOFFICE and FINACLE API provided by CBBL then check into DB if existing then update with new data and if not exist insert into DB and populate in GUI.

b. One customer might have multiple Account, in this case all account no comes in acc\_no tag in comma separated way. In customer table we keep it as it is and in UI we split this by comma and show all account no in drop down and user select one account no. Once the account no is selected then we keep this account no in Loan table(now will be in credit card table).

c. Drop down will show only on creation time. After creation there will be no option to change account no. If it’s necessary to change account no then that application must need to delete and create new application.

FE -3: Card Limit & EMI Capture and save/update

There will be fields in GUI as in field list document and we will use those field to capture and save,update data

FE-4: Document upload and View

Document upload and view will be as like LMS.

1. Which document need to upload will be configurable in Admin panel depending on Card type and customer type.

2. All different type of document will be in tx\_group=’DOCUMENT’ and tx\_sub\_group=’DOCUMENT\_TYPE’ and tx\_value1 will contain value in T\_CONFIGURATION table.

3. Card type and customer type map will be in T\_CARD\_CONFIG table with Interest rate.

4. T\_CARD\_DOC\_MAP will contain all document applicable for card type and customer type map.

5. On card application create some document will be uploaded and some will not. Which is not uploading we will select all those document depending on card type and customer type all also insert into T\_DOCUMENT TABLE, and after creation we will just select documents from that table for any card application.

6. In T\_ DOCUMENT table object\_type will be ‘CREDIT\_CARD’ and id\_ref key will contain primary key of card application info table.

7. We will save document in local directory with folder ‘DOCUMENT/CREDIT\_CARD/application\_key/document\_type.ext’

FE-5: KYC, CIB checking & Validation

FE-6: Existing liabilities, Limit & DBR Analysis

1. In gui there will be a grid where user will able to provide information on column and will click save btn to save.

2. We will save this information in T\_EXISTING\_LIABILITY table with id\_credit\_card\_key.

FE -7: Department wise state /workflow management

FE-8: Role and permission based Field Hide/show

We have 3 types of view.

1. Web (CSE-Branch) view

2. Web (CARD Division) view

3. Web (CRM Approval) view

We will fetch data from DB and show on associated field. User will able to update, recommend to next level, return to lower level based on access.

On code, initially all field will be hidden, we will show fields as per view, this will increase manageability.

FE-9: Card details reports Generate, print and export

As our regular practice.

FE-10: Dynamically showing Signatories and staff ID

FE-11: State wise application visibility on user workstation

We will keep a mapping in DB on which role user will able to see which state data.

FE-12: Card type, interest rate and document config

check pre-Requirement segment.

FE-13: MIS Report and Export to Excel

FE-14: Application grouping and Memo Generate, Print and export

FE-15: Department wise Card Application Tracker

FE-16: Card Type based field hide/show

FE-17: Customer registration on mobile apps

FE-18: Apply by customer using mobile apps

Fe-19: Application status tracking using mobile apps

FE-20: User Management and user accessibility

FE-21: Branch and role group management

FE-22: Login/logout and user profile

FE-23: Work history of user action

# System Architecture and Architecture Design

# 2.1 High level diagram

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