April 2023

Refactory

Certificate In Software Engineering

Final Technical Assessment

REFACTORY UGANDA

CERTIFICATE IN SOFTWARE ENGINEERING

SUMMATIVE TECHNICAL ASSESSMENT

Introduction:

The world is rapidly going digital and many sectors are waking up to this cause. One of the sectors that have __ well is the finance sector. GENQ is a fintake company operating in East Africa and on a mission to disrupt and revolutionize the East African Financial Sector. The main objective of GENQ is to provide Cashless financial services to East African People courtesy of 21st Century technologies.

Challenge:

GENQ wants to build and roll out their KYC (Know your Customer) software application, to capture details of all its customers across east Africa. Following the Agile Software development model, GenQ has already planned the first feature to develop which is the **KYC Registration form**. You are one of the junior software engineers GenQ has and your task is to implement the design of the form in code.

Proposed Module development time:

Total Duration: 4Hours

Requirements [What to be Implemented]:

- System should render the registration form upon request.
- User can enter details of Customer into the registration form.
- User can submit the registration form (with Customer details)
- Upon registration-form submission, the system should validate all fields.
- Upon registration-form validation, if any field is invalid, the system should Inform the user about the invalidity and terminate the submission process.
- After registration form validation, the system should submit a form only if all fields are valid.

- After registration-form submission, the system's Resource server should receive the form data and store it in the database.
- After a successful registration form submission, Validation and data storage, the system should redirect to the same form or reset the form and notify the user with a success message.
- The success message should disappear upon close or upon focus of any of the form elements.

Proposed User Interfaces according to the form designs:

According to the designs of the proposed system, after requesting for the Registration form from the server,

GENQ KYC FORM

Bio Data

First Name

Last Name

Date Of Birth (DD/MM/YYYY)

Gender

Location

Country

State / District

Town

Zip Code

Contacts and Address

Phone Number 1

Phone Number 2

Email

SUBMIT

Below is the proposed look for each of the invalid fields after form validation.

GENQ KYC FORM

Bio Data

Enter your First Name here

Enter your Last Name here

Select your Date of Birth

Select your Gender

Location

Select your Country of Residence

Enter your State / District here

Enter your Town here

Zip Code

Contacts and Address

Phone Number 1

Phone Number 2

Enter your Email here

SUBMIT

Below is the proposed look for the Registration form with valid entries.

GENQ KYC FORM

Bio Data

John	Doe
01/01/1900	Male

Location

Uganda	Kampala
Muyenga	0000

Contacts and Address

+256771234567	+256751234567

johndoe@example.tld

SUBMIT

Below is the proposed look for the Registration form immediately after a successful registration of a loan.

GENQ KYC FORM

Form has been Submitted Successfully!   x

Bio Data

| First Name | Last Name |

| Date Of Birth (DD/MM/YYYY) | Gender |

Location

| Country | State / District |

| Town | Zip Code |

Contacts and Address

| Phone Number 1 | Phone Number 2 |

| Email |

Form Validation Guidelines:

Validation of the Form Fields Should be done basing on the following guidelines:

1. **First Name**

   - Should be a string of not less than 2 characters

   - Should be a string of not more than 255 characters

   - Should not contain a numeric character

2. **Last Name**

   - Should be a string of not less than 2 characters

   - Should be a string of not more than 255 characters

   - Should not contain a numeric character

4. **Date Of Birth**

   - It should be a valid date

   - It should takeon the format (YY/MM/DD),

   - The difference between the date now and the date of birth should not be less than 18 years.

Form Validation Guidelines:

Validation of the Form Fields Should be done basing on the following guidelines:

6. **Adress**

    - Should be a string of not less than 2 characters

    - Should be a string of not more than 255 characters

7. **Gender**

    - Should be a selectable field

    - The only available options are [-- Select Gender --, Male and Female]

    - "-- Select Gender --" as an option is only a Place holder

    - The only options valid for submission are [Male, Female]

Success wishes from

The Refactory Technical Department

On behalf of Refactory

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