# A PROJECT REPORT ON

# Government Citizen Resource Managment

# INFORMATION TECHNOLOGY (SEMESTER VI)

(SUBJECT: SOFTWARE ENGINEERING)



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# Introduction

### **Purpose:**

The purpose of this project is to create a consolidated citizen record database. This project will facilitate the government to change hard copy records to soft copy records. After the successful implementation of this project, the citizen would need only a unique number to identify himself. Companies and Industries would also be able to utilize the data collected, and the government can generate revenue from the same.

### **Overview:**

A citizen or a company after due registration, can visit the online portal, login and apply for various government ventures. Similarly a company can also login to find out

### Goal to implementation:

A citizen, or a company fills up an online form where this project is implemented. After filling up the form the citizen or company will visit the nearest government verification center. Post verification, the citizen is generated a unique Identification number which the citizen can use. The company requesting citizen database will have to mail to the admin of the system. The citizen or a company can visit the website online and login to see their profiles. The citizen can apply for various government ventures including tax payments. Similarly a company can login to find out its various tax details, new government ventures, and citizen data.

### **SOFTWARE REQUIREMENT SPECIFICATION (SRS):**

# **Functional Requirements**

### R.1 –Sign Up

Description: The user is register to completely fill the registration form. This form includes name, email-id, address and mobile number & other details once the user click "submit", validation checks are performed and a temp id no. generated.

Input: Select Personal or Company Sign Up.

Output: Generate temp id no.

Processing: Signing up.

Constraint: None.

### R.1.1 – Verification

Description: moderator checks documents of user & if all okay new account is created. Moderator takes digital copies of documents provided by user. Biometrics is to be recorded.

Input: temp id.

Output: Generate permanent ID no.

Processing: Signing up.

Constraint: None.

### R.2 –Sign In

Description: The user enters id and password or biometrics. After validating details, access permission is granted, and user screen is displayed.

### R.2.1 –Sign in for citizen & company.

Input: Id & password.

Output: redirect user to home screen.

Processing: Signing up.

Constraint: User should be signed up.

### R.2.2 – Sign in for Data access

Description: The user enters id and password & once signed in, it asks for UID & can access data which is allowed to it.

Input: Id & password.

Output: redirect user to home screen.

Processing: Signing up.

Constraint: User should be signed up & history should be maintained.

### **R.2.3: sign in Moderator**

Description: moderator have to sign in by special id & password from verification center.

After signing in the moderator can do some jobs like add & update entries.

### R.2.3.1: Add new entry

Input: temporary UID, select category.

Output: Generate account

Processing: Enter details & scan documents.

Constraint: scanned copy should be saved in database.

### R.2.3.3: Update new entry

Input: temporary UID, select category.

Output: Update entry.

Processing: Enter details & scan documents.

Constraint: scanned copy should be saved in database & inform all documents of person which contains updated details.

### **R.3** – Application

Description: After sign in user can apply for some other government documents.

### R.3.1 -Citizen

Description: The citizen can be apply for pan card, passport, election card etc.

### R.3.1.1: Apply For Pan Card.

Description: if user is eligible for getting pan card by verified info of account then it can get pan card.

Input: Select Apply for Pan Card option.

Output: Pan Card generated if Data verified. Else display error.

Processing: Create Pan Card.

Constraint: Data should be authentic and details should be verified. If not Verification process has to be carried out.

### **R.3.1.2:** Apply For Passport.

Description: if user is eligible for getting passport by verified info of account then it can get pan card. If additional documents are required to get passport then user can go to moderator & do verification process again for new documents.

Input: Select Apply For Passport.

Output: Passport Request Number. Visit the nearest Passport verification center with the Passport Request Number.

Processing: Create Passport.

Constraint: Data should be authentic and details should be verified.

### **R.3.1.3:** Apply For Election ID Card.

Description: if user is eligible for getting election id by verified info of account then it can get pan card. If additional documents are required to get election id then user can go to moderator & do verification process again for new documents.

Input: Select Apply for Election ID card.

Output: Election ID card Request Number. Visit the nearest Government Verification Center.

Processing: Create Election ID Card.

Constraint: Data should be authentic and details should be verified.

### R.3.2 – Company

Description: The Company can be apply for import-export permission etc.

### **R.3.2.1: Import-Export permission**

Description: The application form goes to import-export department & it can be accepted & rejected by department if accepted then permission letter created sent to company account.

Input: import export application form.

Output: permission request if granted then calculate excise.

Processing: Make Payment when import-export done.

Constraint: Data should be authentic and details should be verified in the verification module.

### R.4 -Payment

Description: After sign in user can fill up form & pay taxes.

### R.4.1 -Citizen

Description: After sign in user can fill up form & pay taxes.

### **R.4.1.1:** Income Tax Payment Individual.

Input: income tax return form.

Output: Income Tax Payment.

Processing: Make Payment.

Constraint: Data should be authentic and details should be verified in the verification module.

### R.4.2-Company

Description: After sign in user can fill up form & pay taxes.

### **R.4.2.2:** Income Tax Payment Company.

Input: income tax return form.

Output: Income Tax Payment.

Processing: Make Payment.

Constraint: Data should be authentic and details should be verified in the verification module.

### **R.4.2.3: Service Tax Payment Company.**

Input: service tax form

Output: service Tax Payment.

Processing: Make Payment.

Constraint: Data should be authentic and details should be verified in the verification module.

### R.4.2.4: Excise Payment

Input: import export application form.

Output: permission request if granted then calculate excise.

Processing: Make Payment when import-export done.

Constraint: Data should be authentic and details should be verified in the verification module.

### **R.5** Manage profile request

Description: After sign in user can manage profile like update entry or add entry.

Input: Select Update Details. Insert new details.

Output: Visit the nearest Verification Center to verify the updates and log them on the main

server.

Processing: Update details.

Constraint: Previous details should be logged with the personal user id.

### **R.6: Maintaining History**

Description: After sign in user can view all history it is divide in 3 parts data access, payment, update details.

### **R.6.1: Data access**

Input: Select data access.

Output: Show data access request & result by organizations or departments of government.

Processing: show all entries with requested UID on DB logs.

Constraint: user must logged in.

### R.6.2: Payment

Input: Payment.

Output: Show payments to departments of government & receipt of it.

Processing: show all entries with requested UID on DB logs.

Constraint: user must logged in.

### **R.6.2:** Update request.

Input: select update.

Output: Show requests status & changes details history.

Processing: show all entries with requested UID on DB logs.

Constraint: user must logged in.

### R.7 –Sign out

Description: after work done it kills session.

### R.7.1 –Sign out for citizen & company.

Input: sign out request.

Output: signed out page.

Processing: Signing out.

Constraint: User should be signed up.

### R.7.2 –Sign out for Data access

Description: The user enters id and password & once it signed out it asks for UID & can sign out.

Input: Id & password.

Output: redirect user to sign out screen

Processing: Signing out.

Constraint: User should be signed up & history should be maintained.

# **R.7.3: sign out Moderator**

Description: moderator have to sign out at end of the day.

Input: sign out request

Output: redirect user to sign out screen

Processing: Signing out.

Constraint: User should be signed up & history should be maintained.

# **Non-Functional Requirements**

### 1.1) Reliability

As the term suggests the entire website must be faultless logically. I.e. each transaction must not put the database in inconsistent state. Our design should be such that customers get satisfaction. It should provide trust to customers for their desired stuffs.

### 1.2) Availability

Our system should be available 24×7. Means our application should be available any time when internet connection is available.

At some stage checkpoint are placed so that checking of a system for consistency and redundancy is carried out.

After a power failure or after any undesired event, quick recovery of system should be carried out.

### 1.3) Security

System should keep history of transaction so that any illegal activity is running then it can be found.

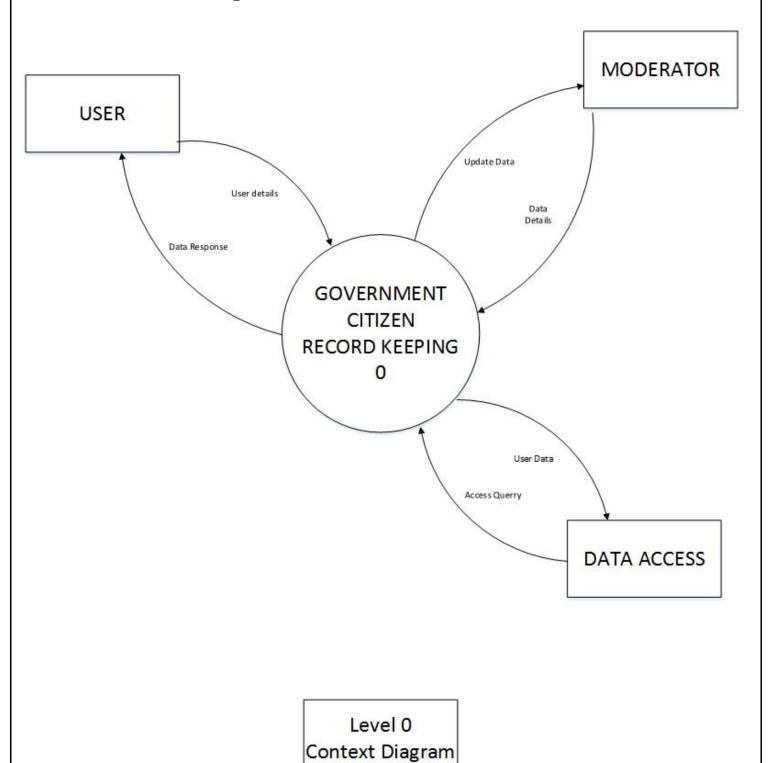
Customer should not have access of all the parts of system. Some parts are restricted to use only for some people i.e. administrator. Ex. History of transaction, other customers account detail.

### 1.4) Portability

This is a web-application. So it runs on any type of browser application (e.g. Mozilla Firefox, internet explorer, opera, Google chrome etc...). So it supports all operating systems (e.g. all windows platform, all UNIX flavor, Mac operating system).

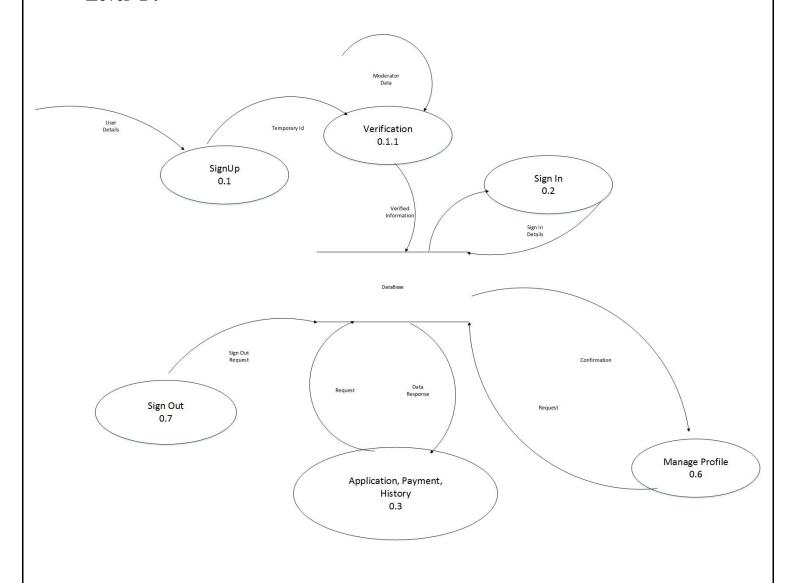
# **DATA FLOW DIAGRAM (DFD):**

# Level 0 Context Diagram:

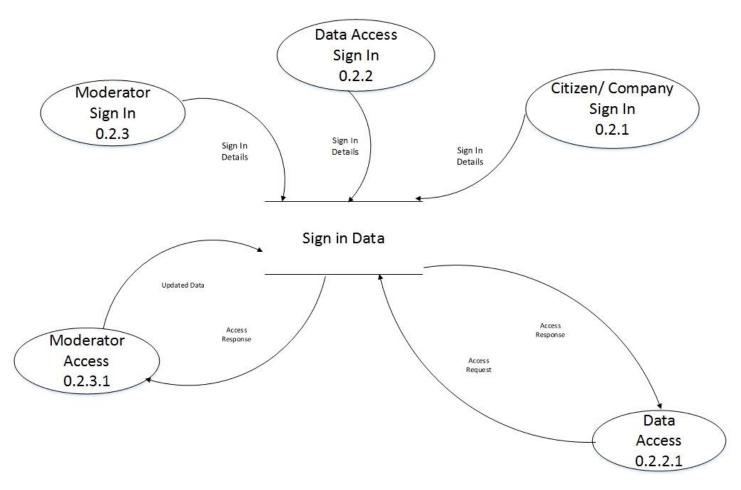


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# Level 1:



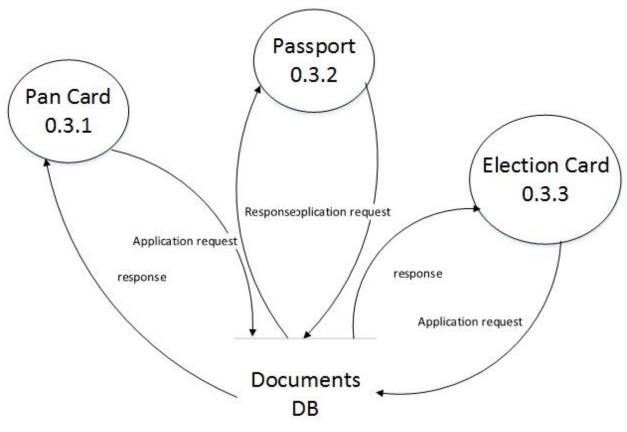
# Level 2:



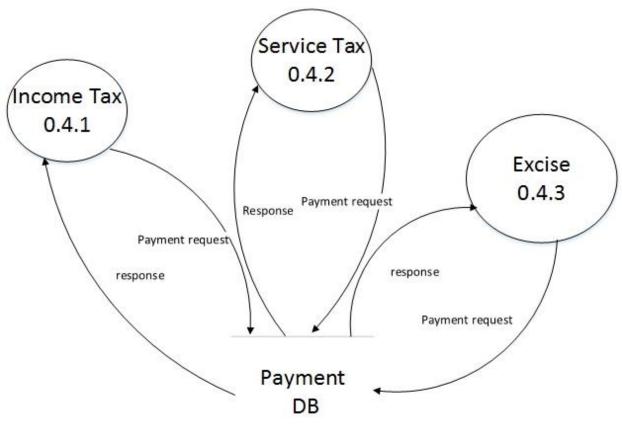
# Government Citizen Resource Managment Level 2: Payment 0.4 Application 0.3 History 0.5 Payment Response Details Application request response response History request User Data Level 2 15

# Government Citizen Resource Managment Level 2 Data Acess 0.7.2 Citizen & Company 0.7.1 ID & Password & Moderator signout request 0.7.3 Signout request signout request Sign In DATA Level 2 16

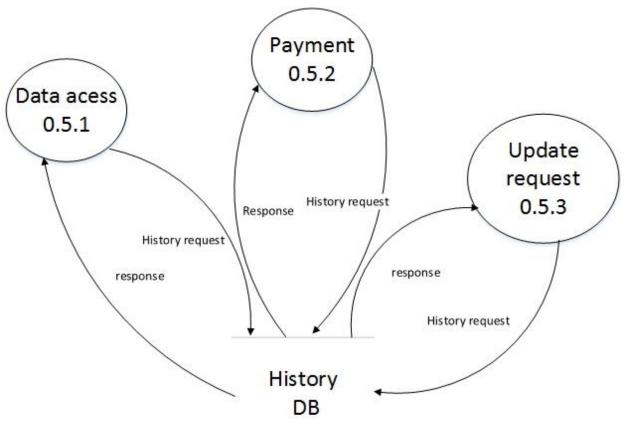
Level 3:



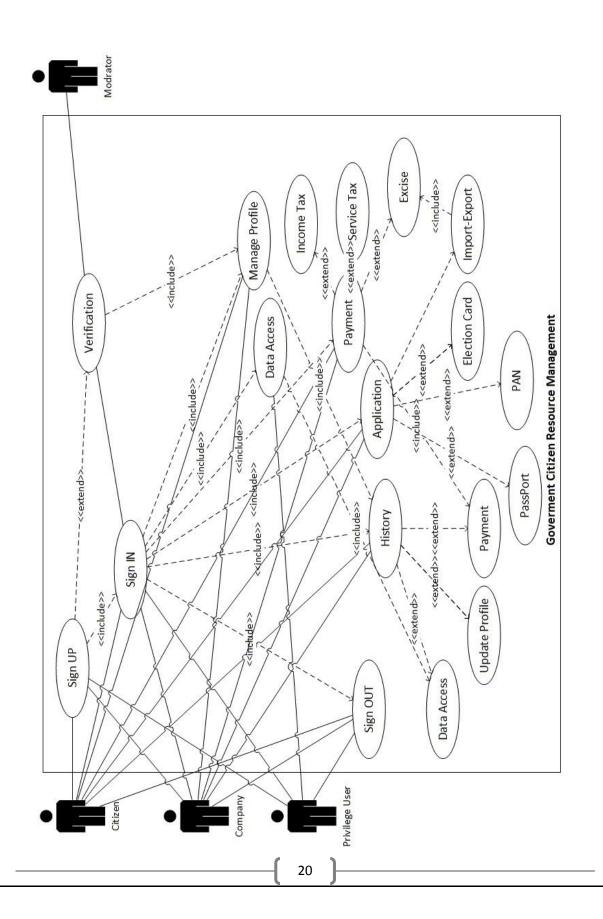
Level 3:



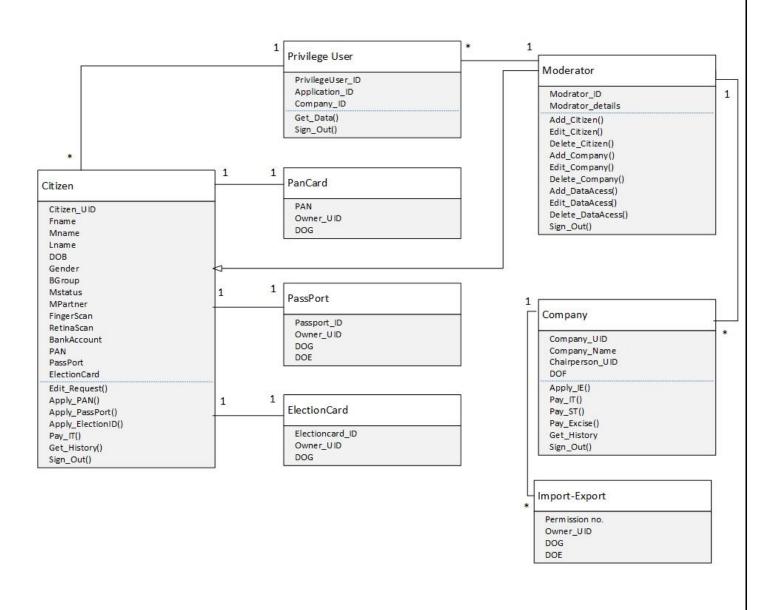
Level 3:



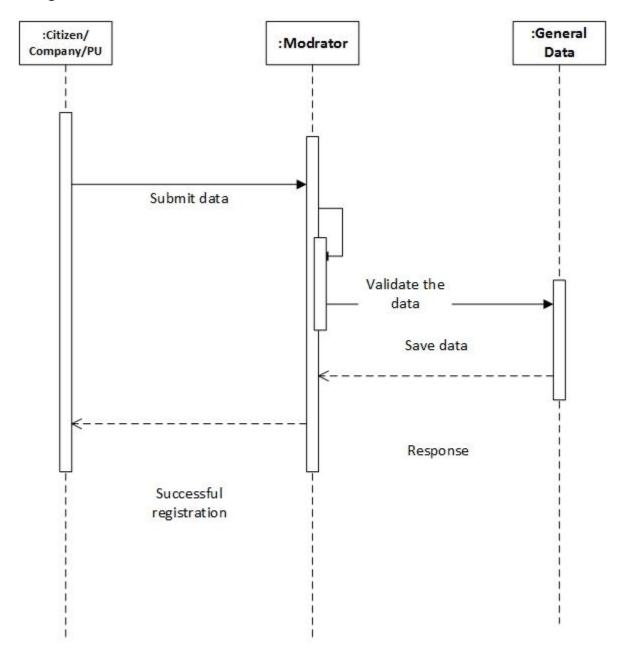
# **USECASE DIAGRAM:**



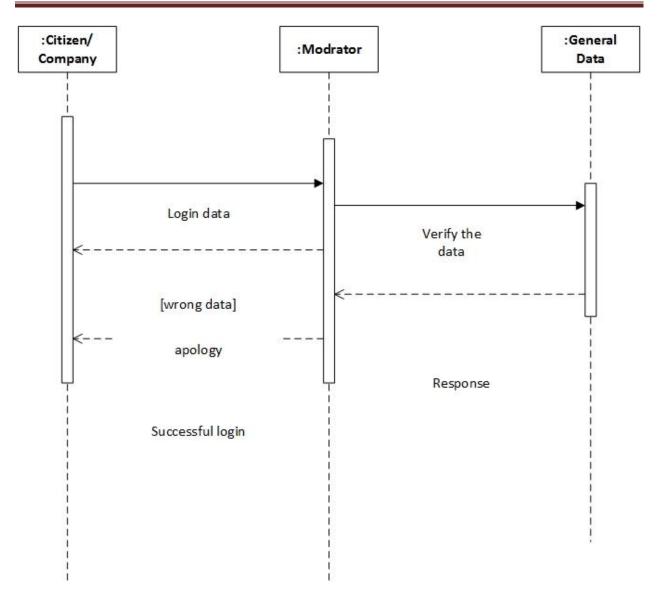
### **CLASS DIAGRAM:**



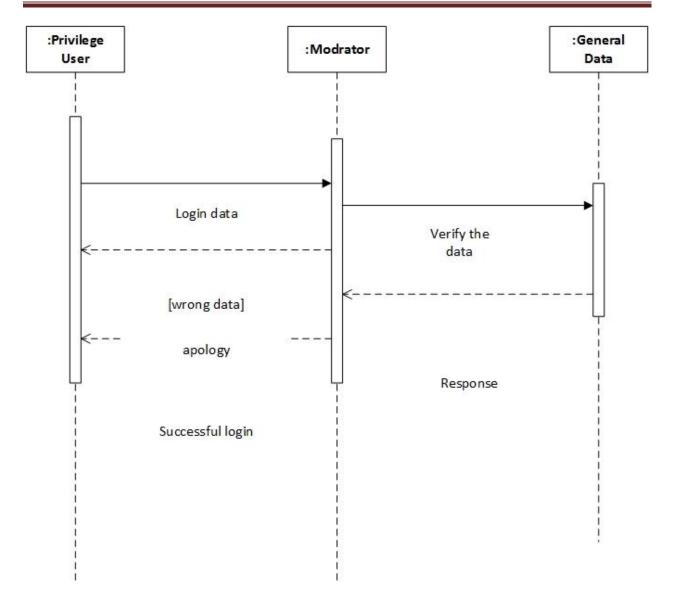
# **SEQUENCE DIAGRAM:**



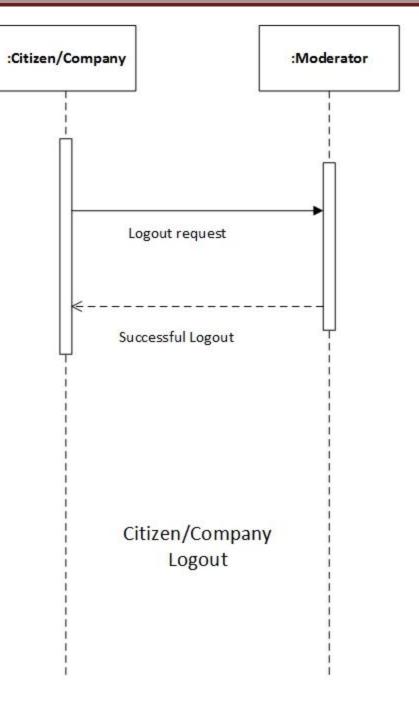
Registration

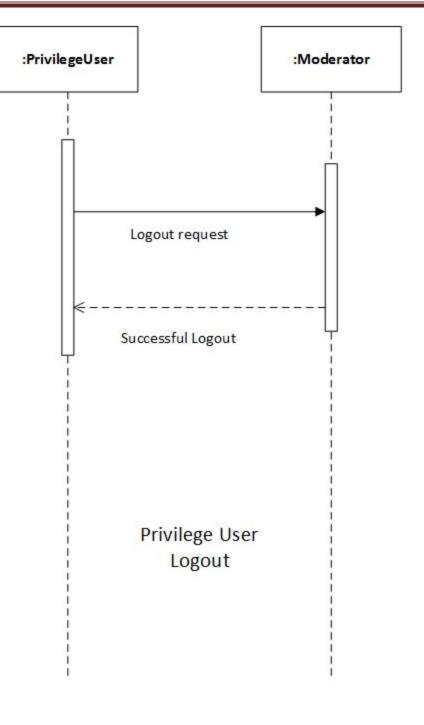


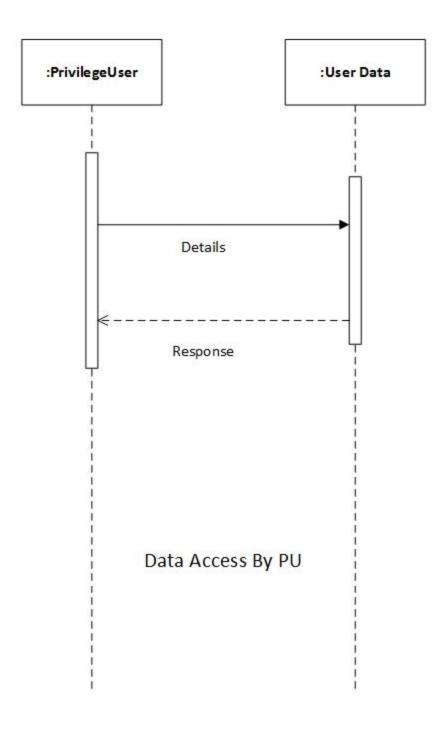
Citizen/Company Login



Privilege User Login



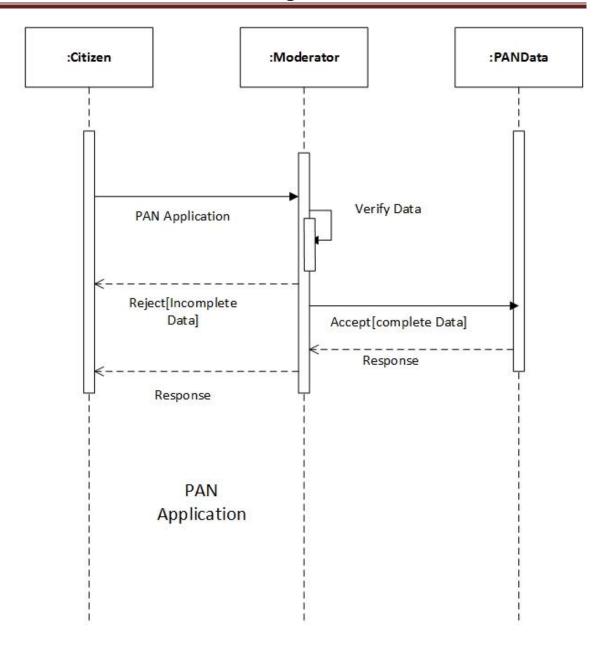


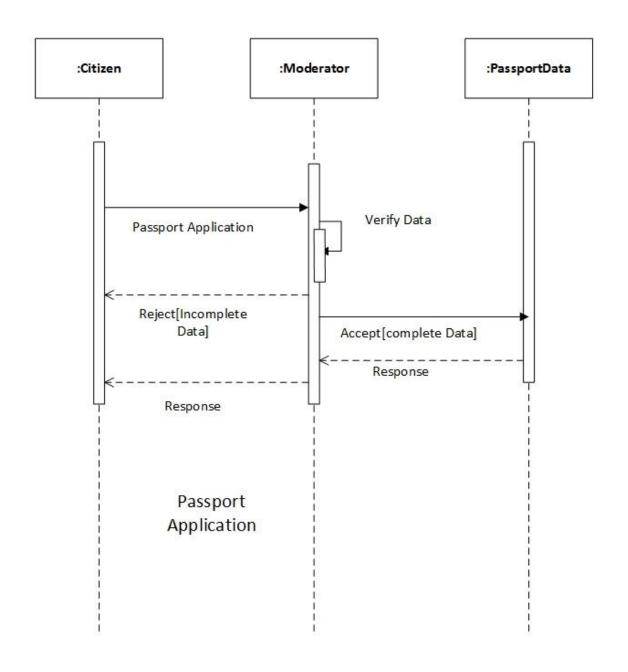


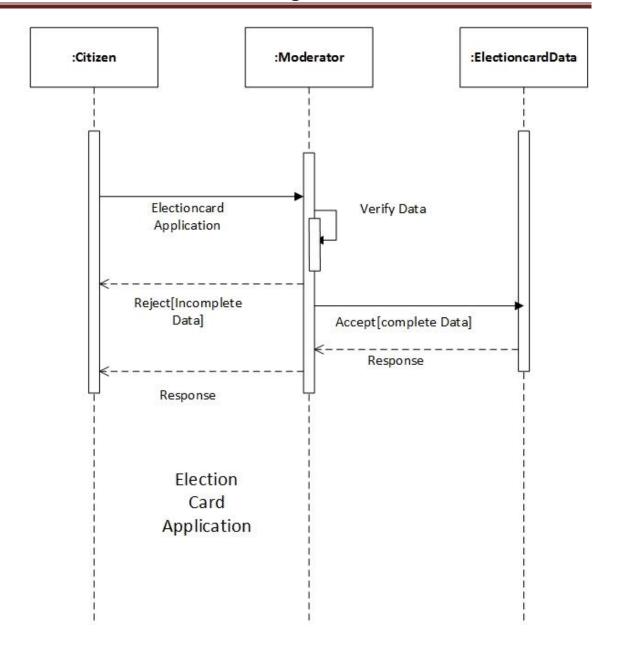
# Government Citizen Resource Managment :Moderator :User Data URN/Docs Response Update Entry 28

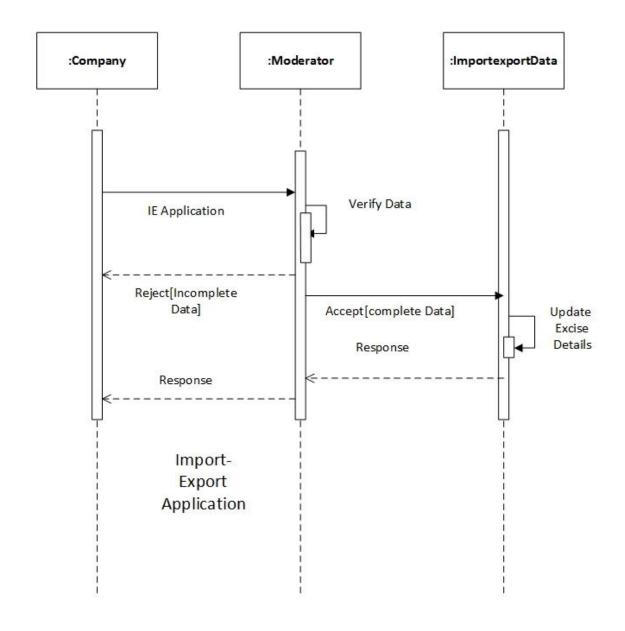
# Government Citizen Resource Managment :PrivilegeUser :User Data Details Response Data Access By PU

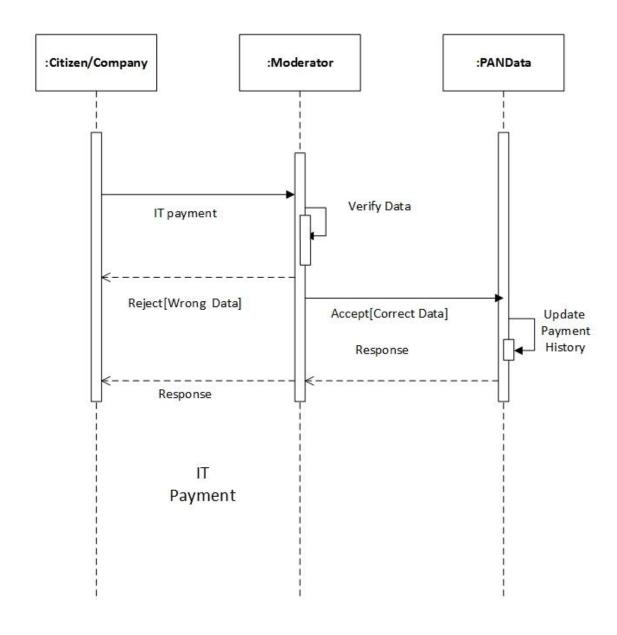
29

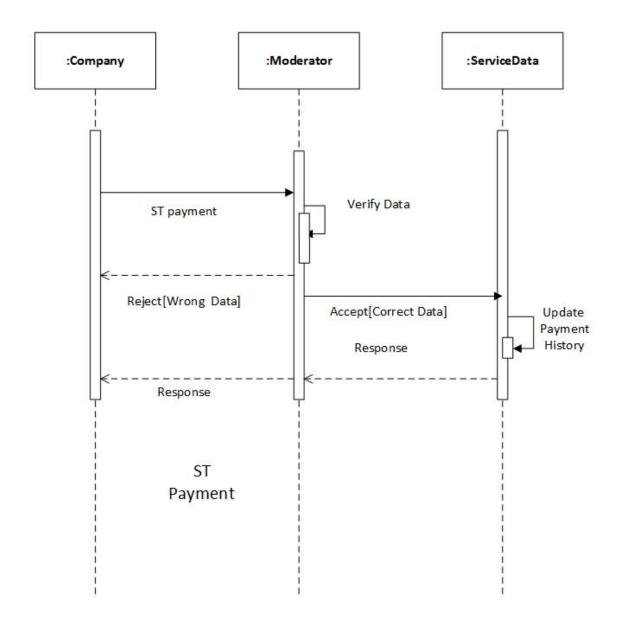


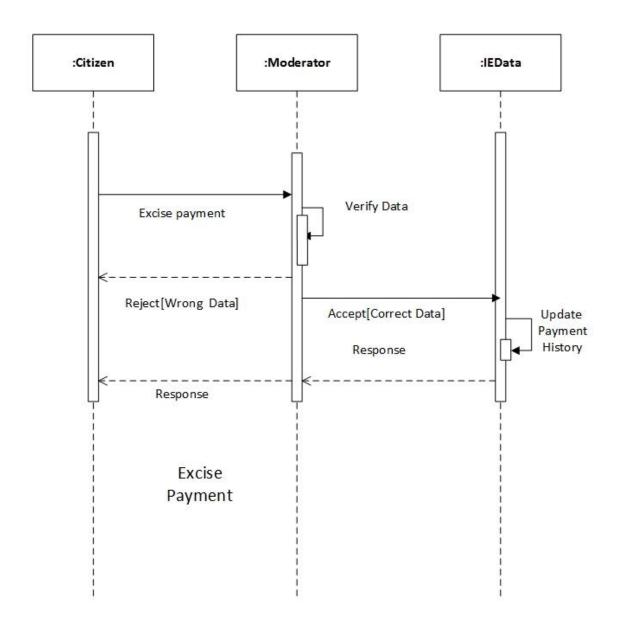


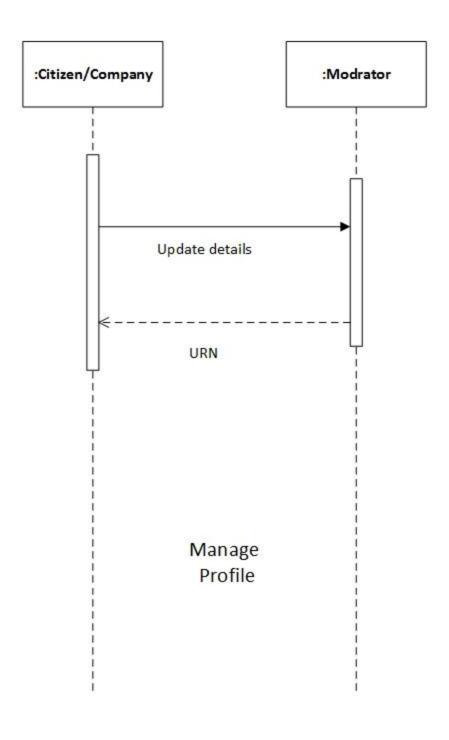


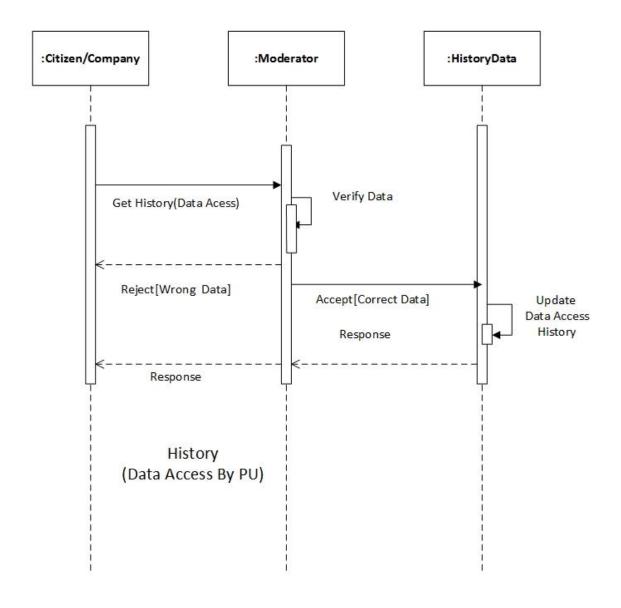


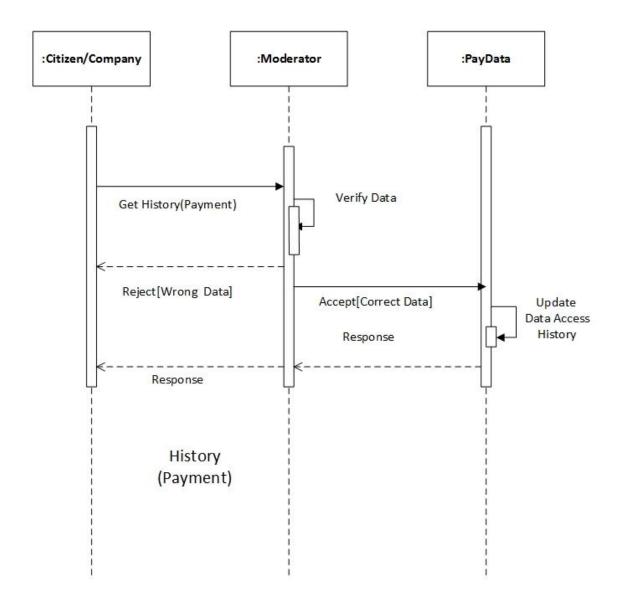


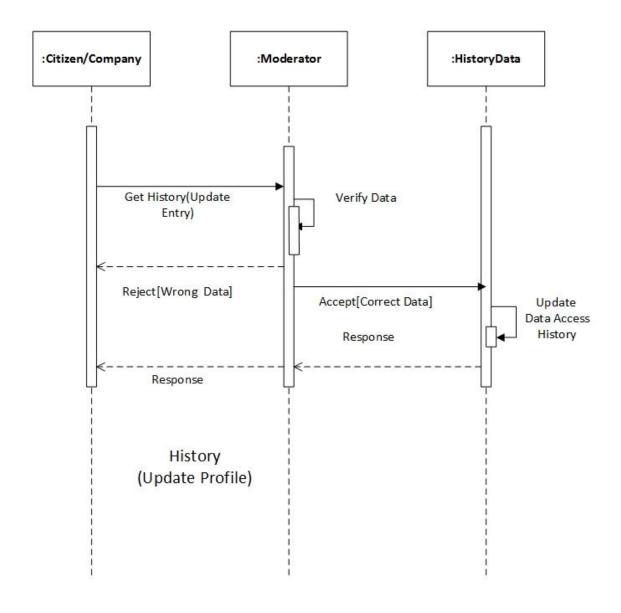




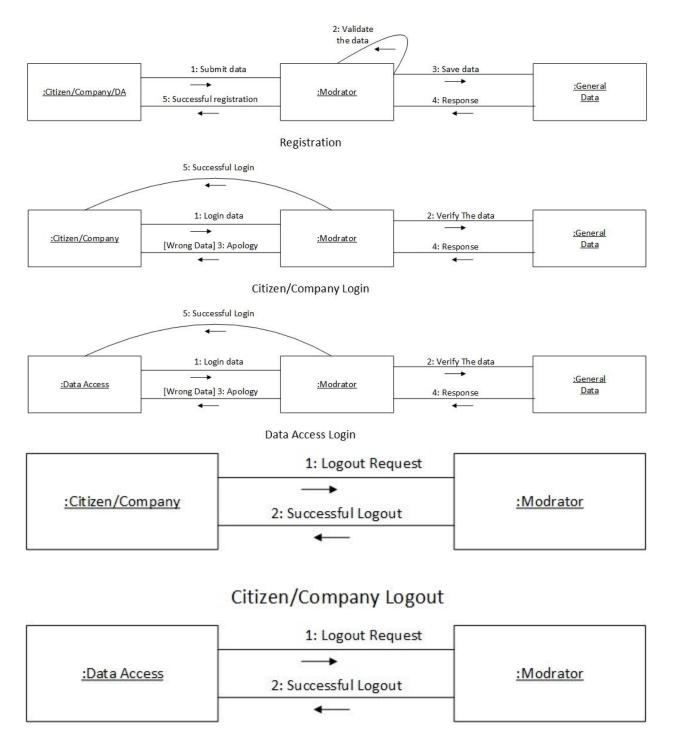








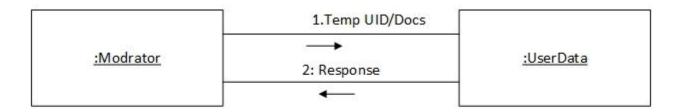
#### **COLLABORATION DIAGRAM:**



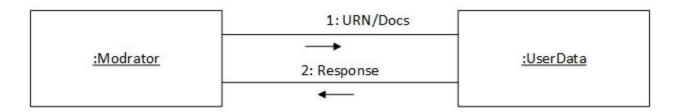
Data Access Logout



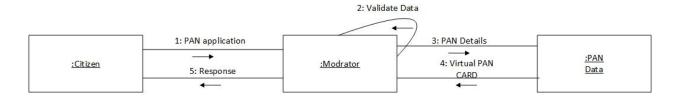
Data Access



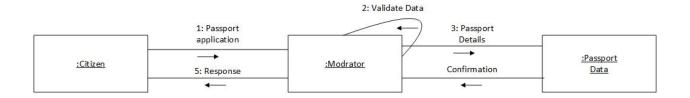
#### Add entry



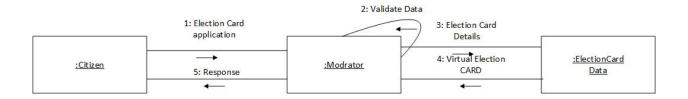
## Update entry



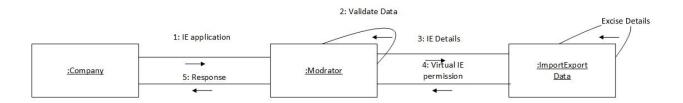
**PAN Application** 



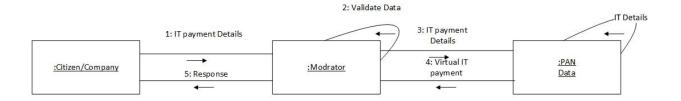
Passport Application



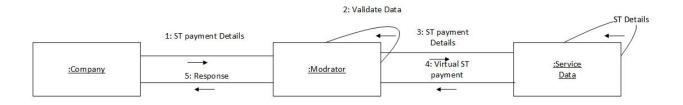
**PAN Application** 



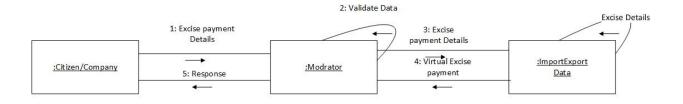
Import-Export Application



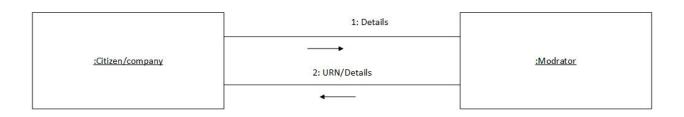
IT Payment



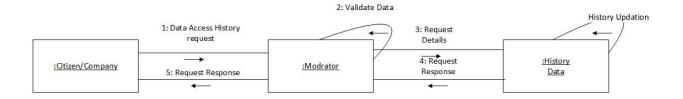
ST Payment



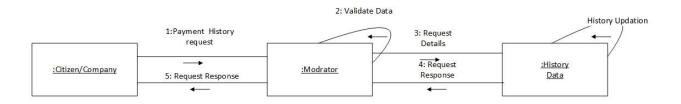
**Excise Payment** 



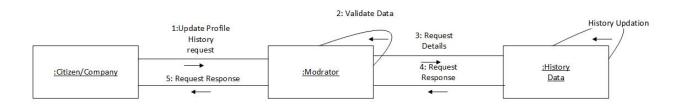
Manage Profile



History(Data Access)

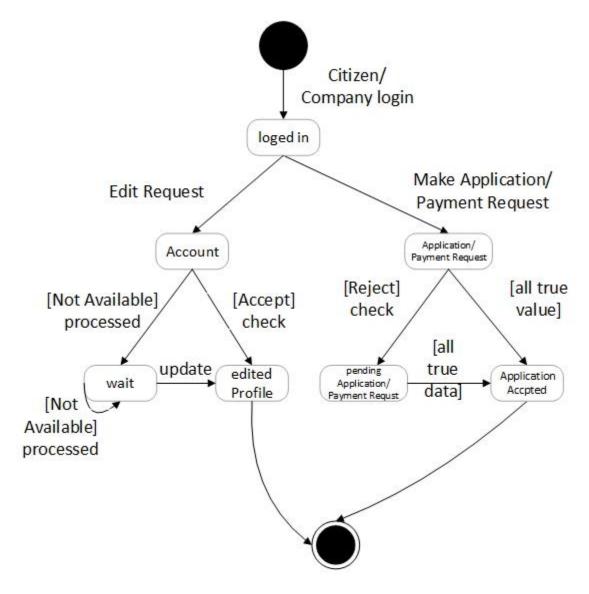


History(Payment)

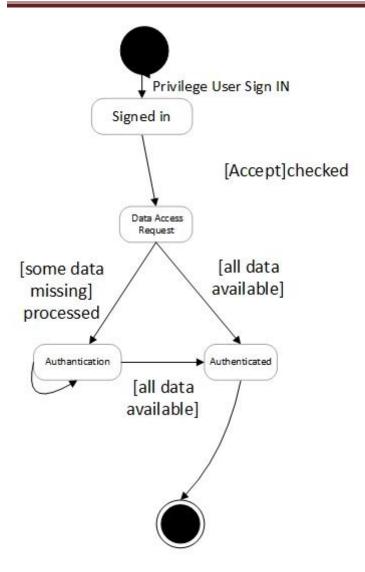


History(Update Profile)

#### **STATE CHART DIAGRAM:**



Citizen/Company

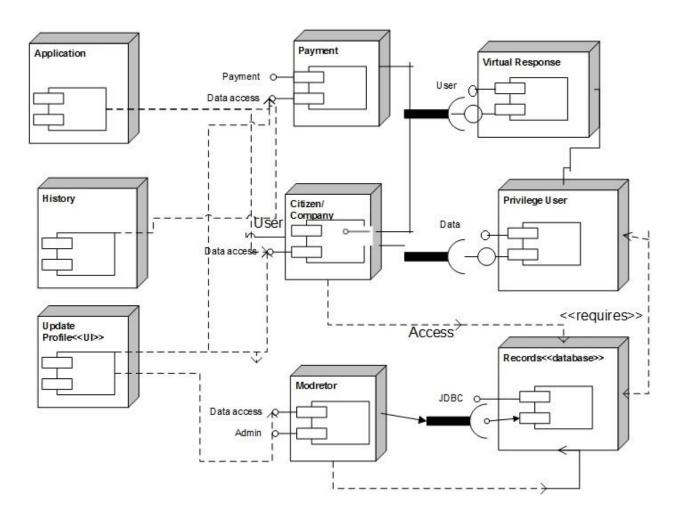


Privilege User

# Government Citizen Resource Managment **ACTIVITY DIAGRAM:** Access Data Privilege User Sign IN Company Sign IN Sign out Citizen Sign IN manage Profile/ History Payment register Citizen/Company/ P<u>U</u> Modrator profile/ History 48

#### **COMPONENT DIAGRAM:**

## Component Diagram



#### **DEPLOYMENT DIAGRAM:**

# Deployment Diagram

