**CSE213 CRA Report Simulating operation of bangladesh energy regulatory commission**

| **Topic: Simulating operation of bangladesh energy regulatory commission** | | |
| --- | --- | --- |
| **ID:** | **Name: MD.Mahbub Rahman** | **User 1 : chairman** |
| **User 2 : Employee** |
| **ID:2120352** | **Name: Sajidur Rahman** | **User 3 : Lawyer** |
| **User 4 : Tariff officer** |
| **ID:2131001** | **Name :Sindid Rahman** | **User5: consumer** |
| **User6: Finance officer** |
| **ID:2110392** | **Name: Anna Paul Toma** | **User7 : District Manager** |
| **User8 : Government Authorities** |

**Possible event type:**

**UIE - - user input to trigger event**

**UID - - user input to be considered as data**

**OP – display content (output)**

**PC – prerequisite check**

**VL – validation check**

**VR – verification check**

**DP – fetching data from file system and process it to get some calculated outcome (data processing)**

| **Login Procedure** | | | |
| --- | --- | --- | --- |
|  | **Goal: To successfully log in and land on a different dashboard** | | **Event type** |
| **Workflow:** | **event-1** | **Display the home page to show login ID, password, forgot password, log in and new citizen sign-in option** | **OP** |
|  | **event-2** | **Input login ID and Password** | **UID** |
|  | **event-3** | **click on login check for ID validation if the ID represents 4 digits(for officials) or 7 digits (for citizens). If not, show the “ID invalid” message under the User ID box.** | **UIE, VL, OP** |
|  | **event-4** | **Verify if the ID and password match or not. If matches go to the user's individual page. If not matched, show an “Incorrect ID or Password” message.** | **VR, DP, OP** |
|  | **event-5** | **If clicked on “Forgot password” Land on a new page to ask for User ID, Phone Number, Verification Code** | **UIE, OP** |
|  | **event-6** | **Provide User ID, Phone Number  to get a prompt on the screen showing generated verification code, input the code in Verification code text field and click on next. If the code is wrong show “Incorrect Code” If right goes to event-7** | **UID, UIE, OP, VR** |
|  | **event-7** | **New page shows New Password, Confirm password text field. Take user input and click on confirm. If the password is 6 characters go to event-1. If not then show the “Password must be 6 characters' ' prompt.** | **OP, UID, UIE, VL** |
|  | **event-8** | **If a new user clicks on “New user Sign in”; based on the current user ID list generate a new User ID and show it on a new page and ask to add New Password and Confirm Password and click on Confirm. If the password is 6 characters move to event-1 if not, show the “Password must be 6 characters” prompt.** | **UIE, DP, UID, VL, OP** |
|  |  |  |  |

| User1 name:Chairman | | | | | |
| --- | --- | --- | --- | --- | --- |
| **User-1, Goal-1** | **Description of Goal-1: This user engages in sending messages, and with his ID within the system.** | | | | **event type** |
| **Workflow:** | **event-1** | **Log-in procedure for Chairman(4 digit ID and pass) will be executed.** | | | **OP, UID, UIE, VL, VR, DP** |
|  | **event-2** | **Choose the “User type” option from the nav-bar.** | | | **UIE/VR** |
|  | **event-3** | **Choose an option of communication Button.** | | | **UIE/OP** |
|  | **event-4** | **Option will be there to choose between the type of message have to be sent,either individual employee.** | | | **UID** |
|  | **event-5** | **If select ‘Individual' Then click on the sent button before select the employee from list then click on sent button.** | | | **UIE** |
|  | **event-6** | **Write the communication chat in text box area.** | | | **UID** |
|  | **event-7** | **Click on sent Button to send message to the recipients.** | | | **UID** |
|  | **event-8** | **Click on the Back Button to go back to home scene.** | | | **UIE** |
|  | | | | | |
| **User-1, Goal-2** | **Description of Goal-2:This user goal where the Chairman can access all kind of information, resources, guidelines, or documentation.** | | | |  |
| **Workflow:** | **event-1** | **Click on User info Button** | | | **UIE** |
|  | **event-2** | **A list of info will be show in Table.** | | | **UIE/OP** |
|  | **event-3** | **If click on there in the table,the contact info and other related info will be show there.** | | | **UIE** |
|  | **event-4** | **Click on Back Button to go back on home scene.** | | | **UID** |
|  | | | | | |
| **User-1, Goal-3** | **Description of Goal-3:The user goal of this is a Chairman can submit complaints, or concerns regarding any issues or violations they encounter.or can take direct action against a member.** | | | | **event type** |
| **Workflow:** | **event-1** | **Click on Complain Report Button.** | | | **UIE** |
|  | **event-2** | **A list of member will be shown in a list.** | | | **OP** |
|  | **event-3** | **Click on the member whom you have report against.** | | | **UIE** |
|  | **event-4** | **Write down the report in a Text Area.** | | | **UID** |
|  | **event-5** | **Click on the Sent Report Button to send the report to the executive committee and token will be shown for follow-up Button.** | | | **UIE/DP** |
|  | **event-6** | **Click on the Back Button to get back to home scene.** | | | **UIE/OP** |
|  | | | | | |
| **User-1, Goal-4** | **Description of Goal-4: This user goal where the Chairman can monitor and track the progress and updates All the others activity** | | | | **event type** |
| **Workflow:** | **event-1** | **Click on others activity Button** | | | **UIE** |
|  | **event-2** | **A text box will be there to enter the name which kind of activity manager wants to monitor.** | | | **UID/OP** |
|  | **event-3** | **Click on the Report Status Button to check for a follow-up.** | | | **UIE/OP** |
|  | **event-4** | **An info Alert Box will be shown in the status of the report weather the report was sent to the executive committee or rejected** | | | **OP** |
|  | **event-5** | **Click on back Button to go back to home scene.** | | | **UIE** |
|  | | | | | |
| **User-1, Goal-5** | **Description of Goal-5: This user goal where Chairman can call or engage in various events, such as meetings, seminars, or conferences organized by bangladesh energy regulatory commission** | | | | **event type** |
| **Workflow:** | **event-1** | **Click on “Joining” or “Start” a Meeting Button.** | | | **UIE** |
|  | **event-2** | **It will show which meeting type is set by the executive committee either ‘Online or offline or ‘No meeting set’.** | | | **UID/OP** |
|  | **event-3** | **The meeting will be shown.** | | | **UID** |
|  | **event-4** | **If the meeting is setup as an online meeting,a google meet link will be shown which will be setup by executive committee.** | | | **OP** |
|  | **event-5** | **If the meeting setup as an offline meeting,it will be shown the date,time and location of the meeting set up by the executive committee.** | | | **UID/OP** |
|  | **event-6** | **If no meeting is setup,then there will be an info alert box that will say”There is no meeting today”.** | | | **UIE** |
|  | **event-7** | **Click on the back Button to go back to the home scene.** | | | **UID** |
|  | | | | | |
| **User-1, Goal-6** | **Description of Goal-6:The user goal where the land owner have to pay all the govt. fees to the department.** | | | | **event type** |
| **Workflow:** | **event-1** | **Click on the Govt fees Button.** | | | **UIE** |
|  | **event-2** | **A table will be shown where the request for funds by the finance Department Is there.** | | | **UID/OP** |
|  | **event-3** | **Select on one of the fund request to send money to.** | | | **UIE/OP** |
|  | **event-4** | **Click on the Send Money Button to transfer money to that fund request.** | | | **UID** |
|  | **event-5** | **Click on the back button to go back to home scene.** | | | **UIE** |
|  | | | | | |
| **User-1, Goal-7** | **Description of Goal-7:This user goal focuses on fostering connections and collaborations among Other Institutions,Company,Ministry**  **;. It involves participating in networking events, forums, or online platforms to engage with peers, share experiences, and collaborate on professional initiatives to the government employee.** | | | | **Event type** |
| **Workflow:** | **event-1** | **Click on Networking and Collaboration Button.** | | | **UIE** |
|  | **event-2** | **Provide a "Join Networking Group" button that users can click to become a member of an industry-specific networking group within the land registration platform. Upon clicking the button, a text area may appear where users can enter their details and submit their request to join.** | | | **UID/OP** |
|  | **event-3** | **Display a "Browse Profiles" button that users can click to explore profiles of other professionals in the land registration industry. Clicking on a profile may open a modal or a new page with detailed information about the selected user.** | | | **OP** |
|  | **event -4** | **Include a "Send Connection Request" button on user profiles. When clicked, a text area or form can appear where users can write a personalized message and send the connection request to the selected professional.** | | | **UID** |
|  | **event-5** | **Include a "Share Resource" button that users can click to upload and share resources within the land registration platform. Clicking the button can open a file upload interface or a text area where users can enter resource details and attach relevant files.** | | | **UID** |
|  | **event-6** | **Click on Back Button to go back to home scene.** | | | **UID/OP** |
|  | | | | | |
| **User-1, Goal-8** | **Description of Goal-8:The user click to accept or reject proposal** | | | | **event type** |
| **Workflow:** | **event-1** | **Click on “accept” to accept the proposal** | | | **UIE** |
|  | **event-2** | **Click on “Reject” to Reject the proposal** | | | **UID/OP** |
|  | **event-3** | **Click on Save Button to save the info** | | | **UIE/OP** |
|  | **event-4** | **Click on back button to go back to home scene.** | | | **UID** |

| User-2 name:Employee | | | | | |
| --- | --- | --- | --- | --- | --- |
| **User-2, Goal-1** | **Description of Goal-1:This user goal where the Employee can access information about various committees, their members, roles, and responsibilities within the department.** | | | | **event type** |
| **Workflow:** | **event-1** | **Click on the View Employee info Button.** | | | **UIE** |
|  | **event-2** | **The user will be presented with a table containing the user info of the employee such as ‘ID’,’Name’,and ‘salary info’.** | | | **UID/OP** |
|  | **event-3** | **Click on Back Button to go back to the home scene.** | | | **UIE** |
|  | | | | | |
| **User-2, Goal-2** | **Description of Goal-2:Instead this user goal can be where the Employee can manage and track their assigned tasks, set priorities, and update the status of their work.** | | | | **event-type** |
| **Workflow:** | **event-1** | **Click on the Work Due Button** | | | **UIE** |
|  | **event-2** | **It will be shown which tasks are currently going on the “Ongoing Works” section and the tasks that will need to be done within the next week in the “Upcoming works” section.** | | | **UID/OP** |
|  | **event-3** | **After completing tasks,they can be selected and clicking on the “Mark as done” Button will mark the tasks as completed.** | | | **UID/OP** |
|  | **event-4** | **Click on the Back Button to go back to home scene.** | | | **UIE** |
|  | | | | | |
| **User-2, Goal-3** | **Description of Goal-3:The user goal where the Employee can report any concerns, issues, or incidents within the department through the proper channels.** | | | | **event type** |
| **Workflow:** | **event-1** | **Click on the Complaint Button** | | | **UIE** |
|  | **event-2** | **A list of members will be shown.** | | | **OP** |
|  | **event-3** | **Click on members to complain against.** | | | **UID/OP** |
|  | **event-4** | **Write the complaint in a text box.** | | | **UID/OP** |
|  | **event-5** | **Click on the Complain button to send the complaint to H.R and a dialog box will be shown with the token for follow-up.** | | | **UID** |
|  | **event-6** | **Click on Back Button to go back to home scene.** | | | **UIE** |
|  | | | | | |
| **User-2, Goal-4** | **Description of Goal-4:This user goal where the Employee can access details about their salary, benefits, allowances, and other related compensation components.** | | | | **event type** |
| **Workflow:** | **event-1** | **Click on Salary Button** | | | **UIE** |
|  | **event-2** | **Employees can check if the salary of previous months is due by checking the status of the salary in previous months represented in a table,also if paid then the transaction method,paid amount, and bonus amount.** | | | **UID/OP** |
|  | **event-3** | **There will be an option to transfer the current month's salary (if paid) from his/her bank account to bkash by clicking Button or to Nagad by clicking on the Transfer Money to nagad Button.** | | | **UID/OP/VL** |
|  | **event-4** | **Click on the Back Button to go back to Home scene.** | | | **UIE** |
|  | | | | | |
| **User-2, Goal-5** | **Description of Goal-5:The user goal where the Employee can submit requests for time off, track their leave balance, and view their approved or pending leave applications.** | | | | **event type** |
| **Workflow:** | **event-1** | **Click on the Request Leave Button** | | | **UIE** |
|  | **event-2** | **There will be a ‘Summary’ text field to type in the summary of the reason for taking leave.** | | | **OP/UID** |
|  | **event-3** | **In the ‘Body’ text field, the details regarding leave requests to the executive committee.** | | | **OP** |
|  | **event-4** | **Click on the Send request Button to send the leave request to executive committee.** | | | **UID** |
|  | **event-5** | **Click on the Back Button to go back to home scene.** | | | **UIE** |
|  | | | | | |
| **User-2, Goal-6** | **Description of Goal-6:This user goal focuses on the Employee's ability to manage and organize documents within the system. It includes tasks such as uploading, categorizing, and retrieving important documents related to the operations of the department.** | | | | **event type** |
| **Workflow:** | **event-1** | **Click on Document Management Button.** | | | **UIE** |
|  | **event-2** | **Provide an "Upload Documents" button that users can click to upload land registration-related documents. Clicking the button can open a file selection interface or drag-and-drop area where users can choose files from their device to upload.** | | | **UID** |
|  | **event-3** | **Include a "Manage Documents" button that users can click to access their uploaded documents. Clicking the button can display a document management interface where users can create folders, move files, and apply tags or labels for organization.** | | | **UID** |
|  | **event-4** | **implement a "Search Documents" button or search bar that users can click to perform a keyword-based search across their uploaded documents. Clicking the button or entering a search term can display relevant results based on document titles, content, or metadata.** | | | **UID/OP** |
|  | **event-5** | **Provide a "Generate Reports" button that users can click to create comprehensive reports based on their uploaded documents. Clicking the button can open a report generation interface where users can specify criteria and generate customized reports.** | | | **UID/OP** |
|  | **event-6** | **Click on Back Button to go back to home scene.** | | | **UIE** |
|  | | | | | |
| **User-2, Goal-7** | **Description of Goal-7:The user goal received message will receive message from Land Owner user for any emergency message for employee or need any info from employee.** | | | | **event type** |
| **Workflow:** | **event-1** | **Click on the Received message Button.** | | | **UIE** |
|  | **event-2** | **Provide a "Received Message" button it will show message from land owner user type.** | | | **UID/OP** |
|  | **event-3** | **After that employee can replay message from this chat box.Then click on send button for message.** | | | **UID** |
|  | **…** | **Click on Back Button to go back to home scene.** | | | **UID/OP** |
|  | | | | | |
| **User-2, Goal-8** | **Description of Goal-8:This user goal emphasizes the Employee's engagement in training and development initiatives. It includes accessing training materials, participating in workshops or webinars, and acquiring new skills and knowledge relevant to their role and professional growth.** | | | | **event type** |
| **Workflow:** | **event-1** | **Click on the Training and Development Button** | | | **UIE** |
|  | **event-2** | **Provide a "Training Calendar" button or menu option that users can click to access the training schedule and upcoming sessions. Clicking the button can display a calendar view or a list of training events.** | | | **UID/OP** |
|  | **event-3** | **Implement a "Training Registration" button or option where users can sign up for upcoming training sessions. Clicking the button can open a registration form where users can enter their details and select the desired training session.** | | | **UID/OP** |
|  | **event-4** | **Provide a "Training Resources" button or section where users can access learning materials, presentations, videos, or other resources related to training and development. Clicking the button can open a library or resource center.** | | | **UID/OP** |
|  | **event-5** | **Include a "Training Feedback" button or option where users can provide feedback on training sessions they have attended. Clicking the button can open a feedback form or survey where users can share their opinions, suggestions, and ratings for the training content, delivery, and overall experience.** | | | **UID** |
|  | **event-6** | **Click on Back Button for back to home scene.** | | | **UIE** |

| User-3 name: Lawyer | | | | | |
| --- | --- | --- | --- | --- | --- |
| **User-3, Goal-1** | **Description of Goal-1: As a Lawyer, this user's goal is to provide assistance and guidance to consumer and electrical department tariff process.** | | | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password** | | | **UIE,VL,VR,**  **UID,OP** |
|  | **event-2** | **Access and set meeting for energy for different energy departments using set meeting button** | | | **UIE** |
|  | **event-3** | **Access view online or offline meeting in a specific date using join meeting button** | | | **UIE,** |
|  | **event-4** | **File a case against any other user .** | | | **UIE** |
|  | **event-5** | **See other filed cases by consumers or power departments** | | | **OP,UIE** |
|  | **event-6** | **Can submit a leave request to the chairman to verify the authenticity of the land data.** | | | **UID,OP** |
|  | **event-9** | **Access and view energy departments information to check if the information matches any existing data** | | | **UID,OP** |
|  | | | | | |
| **User-3, Goal-2** | **Description of Goal-2: Provide assistance and guidance to energy departments or consumers in the tariff process using meeting** | | | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password** | | | **UIE,VL,VR,**  **UID,OP** |
|  | **event-2** | **Navigate to set meeting if there is any problem or issues with the existing data of consumers or energy departments** | | | **UID** |
|  | **event-3** | **Set meeting if meeting is online or offline** | | | **UID** |
|  | **event-4** | **Set meeting time** | | | **UID** |
|  | **event-4** | **Set url/location for online offline meeting** | | | **UID,OP** |
|  | | | | | |
| **User-3, Goal-3** | **Description of Goal-3: Search for and join existing meeting and join them using Join meeting button** | | | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password** | | | **UIE,VL,VR,**  **UID,OP** |
|  | **event-2** | **Navigate to Join meeting button to search for meetings** | | | **DP** |
|  | **event-3** | **It show alert if there is any meeting to day by any user** | | | **DP,PC,VL** |
|  | **event-4** | **Select specific date for meeting searching** | | | **UIE,OP** |
|  | **event-5** | **Check meeting location ,link in the box** | | | **OP** |
|  | **event-6** | **Provide guidance and facilitate discussions among them with legality in specific dates** | | | **UID** |
|  | | | | | |
| **User-3, Goal-4** | **Description of Goal-4: Initiate or support legal proceedings, cases, or petitions to address violations or provide legal aid** | | | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password** | | | **UIE,VL,VR,**  **UID,OP** |
|  | **event-2** | **Navigate to the "Case list" section in the system** | | | **UIE** |
|  | **event-2** | **Access the list of pending legal cases.** | | | **DP,OP** |
|  | **event-3** | **Select a legal case from the list to remove if it's solved through mediating between energy department and consumers.** | | | **UIE,OP** |
|  | **event-4** | **file a case of any flawed data found in consumer or energy department information.** | | | **UIE,OP** |
|  |  | | | |  |
| **User-3, Goal-5** | **Description of Goal-5: Receive, record, and manage complaints or grievances related to legal issues** | | | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password.** | | | **UIE,VL,VR,**  **UID,OP** |
|  | **event-2** | **Navigate to the "file a Complaint" section in the system** | | | **DP** |
|  | **event-3** | **Review and prioritize the complaints and write a complaint against any employee or consumer or energy department.** | | | **UIE,OP** |
|  | **event-4** | **Select consumer or energy department id .** | | | **DP** |
|  | **event-5** | **Write a summary of the complaint .** | | | **UIE** |
|  | **event-6** | **Write the message body of the complaint explaining the situation.** | | | **UID** |
|  | | | | | |
| **User-3, Goal-6** | **Description of Goal-6: file a case on behalf of the consumer for issues such as energy consumption dispute** | | | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password.** | | | **UIE,VL,VR,**  **UID,OP** |
|  | **event-2** | **Navigate to file a case.** | | | **UIE** |
|  | **event-3** | **Write a case summary.** | | | **UID** |
|  | **event-4** | **Write consumer or department name.** | | | **UID** |
|  | **event-5** | **Submit cases to monitor and mediate issues** | | | **UIE** |
|  | | | | | |
| **User-3, Goal-7** | **Description of Goal-7:Submit a leave request to District manager to gain time to verify case issues** | | | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password.** | | | **UIE,VL,VR,**  **UID,OP** |
|  | **event-2** | **Navigate to the Leave Request button** | | | **UIE** |
|  | **event-3** | **Select ID depending on the Lawyer** | | | **UIE,DP** |
|  | **event-4** | **Write a summary in the summary section for specifics** | | | **UIE,DP** |
|  | **event-5** | **Write in detail in the body section about the reason for the leave request.** | | | **UIE** |
|  | | | | | |
| **User-3, Goal-8** | **Description of Goal-8: Analyze the data of pre-registered consumers information in consumer INFORMATION** | | | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password.** | | | **UIE,VL,VR,**  **UID,OP** |
|  | **event-2** | **Navigate to the "Get consumer information" section in the system** | | | **DP** |
|  | **event-3** | **Select id according to land owner information** | | | **UIE** |
|  | **event-4** | **Check consumer data** | | | **DP** |
|  | **event-5** | **Analysis the consumer data and energy department data if its complete and authentic** | | | **DP** |

| User-4 name: Tariff officer | | | |
| --- | --- | --- | --- |
| **User-4, Goal-1** | **Description of Goal-1: The user can help any department pay tariffs on energy consumption** | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password** | **OP, UID, UIE, VL, VR, DP** |
|  | **event-2** | **Access the "energy department information" section to see land information of available energy departments given from the data provided by the land owner.** | **UIE,DP** |
|  | **event-3** | **File a case if any tariff issues are found in energy department’s information** | **OP** |
|  | **event-4** | **Access set meeting to set a meeting with energy departments to discuss issues found .** | **UIE** |
|  | **event-5** | **Access join meetings to check if there are any meetings scheduled.** | **OP,DP** |
|  | **event-5** | **Use calculate tariff butto to see and add expenses of each department and calculate tariff of each department .** | **OP,UID,DP** |
|  | | | |
| **User-4, Goal-2** | **Description of Goal-2: Fill up energy department information using land buyer information button** | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password** | **UIE,VL,VR,**  **UID,OP** |
|  | **Event-2** | **Access the "energy department information" section in the system** | **UIE** |
|  | **event-3** | **Fill up sector,total energy spent per year,total budget** | **UID** |
|  | | | |
| **User-4, Goal-3** | **Description of Goal-3: Set up meeting to discuss issues of consumer,energy department,finance department** | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password** | **UIE,VL,VR,**  **UID,OP** |
|  | **event-2** | **Access the "Set meeting" button section in the system** | **UIE** |
|  | **event-3** | **Select meeting type** | **UID** |
|  | **event-4** | **Choose a date for meeting** | **UID** |
|  | **event-5** | **Choose meeting location** | **UID** |
|  | **event-6** | **Choose meeting link if its online** | **DP** |
|  | **event-7** | **Select meeting with** | **UID** |
|  | | | |
| **User-4, Goal-4** | **Description of Goal-4: Use show meeting to search for and be alerted of any meetings of present date** | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password** | **UIE,VL,VR,**  **UID,OP** |
|  | **event-2** | **Navigate to the “Show meeting” button.** | **UIE** |
|  | **event-3** | **It shows an alert if there is any meeting today by any user.** | **DP,PC,VL** |
|  | **event 4** | **Select a date to search for a meeting set by other users.** | **UID** |
|  | **event-5** | **Select meeting type.** | **UID** |
|  | **event-6** | **Select set by which will show other users for example employee,government authority,energy department** | **UID,DP** |
|  | | | |
| **User-4, Goal-5** | **Description of Goal-5:** | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password.** | **UIE,VL,VR,**  **UID,OP** |
|  | **event-2** | **Navigate to pay land purchase fee** | **UIE** |
|  | **event-3** | **Select land owner using the combobox** | **DP** |
|  | **event-4** | **Load land owner information using load “land user info” button** | **DP,OP** |
|  | **event-5** | **type the amount to be paid in the payment amount section** | **UID** |
|  | **event-6** | **Press “Pay” button to complete payment** | **UIE** |
|  | | | |
| **User-4, Goal-6** | **Description of Goal-6: File a case for any issues which is affecting the tariff process or purchase** | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password.** | **UIE,VL,VR,**  **UID,OP** |
|  | **event-2** | **Navigate to “File a case” button** | **UIE** |
|  | **event-3** | **Fill up the case summary in detail about the reason of the case** | **UID** |
|  | **event-4** | **Write who is this case against** | **UID** |
|  | **event-5** | **Press “send” button to send the data to Lawyer for solving** | **UIE** |
|  | | | |
| **User-4, Goal-7** | **Description of Goal-7: This goal is to demand tariff from the energy departments** | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password.** | **UIE,VL,VR,**  **UID,OP** |
|  | **event-2** | **Navigate to check due tariffs** | **OP,UIE** |
|  | **event-3** | **Select energy department ID** | **UIE,DP** |
|  | | | |
| **User-4, Goal-8** | **Description of Goal-8: This goal is to check received tariff yearly.** | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password.** | **UIE,VL,VR,**  **UID,OP** |
|  | **event-2** | **Navigate to “paid tariff” section** | **UIE** |
|  | **event-3** | **Select department id** | **PC,UID** |
|  | **event-4** | **Select date** | **UID,DP,UIE** |

| User-5 name: Consumer | | | |
| --- | --- | --- | --- |
| **User-5, Goal-1** | **Description of Goal-1: As a consumer Login Procedure for officials will login with 4 digit ID (This id will be given by the control office) .** | |  |
| **Workflow:** | **event-1** | **User can see the dashboard scene** | **OP** |
|  | **event-2** | **Users can create their profile with their appropriate information on the create profile button.** | **OP/ UIE/UID** |
|  | **event-3** | **User can use the service button for taking the service that government provide** | **UIE/OP/UID** |
|  | **event-4** | **Here user give their complain for any issues by using complain button with their nid and select department and date** | **OP/ UIE/UID** |
|  | **event-5** | **Select the set meeting button for set their meeting with any department** | **OP/UIE/UID** |
|  | **event-6** | **User can use Profile Information button for seeing their created profile** | **OP** |
|  | **event-7** | **Users can use the Show complain button for seeing their giving complain to specific department** | **OP** |
|  | **event-8** | **Users can use the complain Pie Chart button for seeing the complain rate to specific department** | **OP** |
|  | **event-9** | **Users can use the Meeting information button for seeing the meeting information** | **OP** |
|  | | | |
| **User-5, Goal-2** | **Description of Goal-2: Consumers can create their profile with their appropriate information on create profile profile button.** | |  |
| **Workflow:** | **event-1** | **Select date on the datepicker** | **UID** |
|  | **event-2** | **Write users first name on the first name text field** | **UID/UIE** |
|  | **event-3** | **Write users last name on the last name text field** | **UID/UIE** |
|  | **event-4** | **Users give their appropriate nid number on the nid number text field** | **UID/UIE** |
|  | **event-5** | **Write users appropriate present address on the present address text field** | **UID/UIE** |
|  | **event-6** | **Write users appropriate permanent address on the permanent address text field** | **UID/UIE** |
|  | **event-7** | **select the save button for saving all the given information which is given by the user and get an alert message for confirming the profile is created or not.** | **UIE/OP** |
|  | | | |
| **User-5, Goal-3** | **Description of Goal-3: For seeing all the given information of the consumers which are given on profile information** | |  |
| **Workflow:** | **event-1** | **Given date is showing in the table** | **OP** |
|  | **event-2** | **Users given first name on the first name text field is showing on the table first name column** | **OP** |
|  | **event-3** | **Users given last name on the last name text field , is showing on the table last name column** | **OP** |
|  | **event-4** | **users given appropriate nid number on the nid number text field , is showing on the table nid number column** | **OP** |
|  | **event-5** | **Users given appropriate present address on the present address text field , is showing on the table present address column** | **OP** |
|  | **event-6** | **Users given appropriate permanent address on the permanent address text field , is showing on the table permanent address column** | **OP** |
|  | | | |
| **User-5, Goal-4** | **Description of Goal-4: consumer can use the service button for taking the service that government provide** | |  |
| **Workflow:** | **event-1** | **Write what type of information user wants to know on the text area** | **UID** |
|  | **event-5** | **For send all given data ,click on the send button and get a alert message that the message or information is sent or not** | **UIE/OP** |
|  | | | |
| **User-5, Goal-5** | **Description of Goal-5: Consumer give their complain for any issues by using give complain button** | |  |
| **Workflow:** | **event-1** | **Select date on the datepicker** | **UID** |
|  | **event-2** | **Write appropriate nid number of the consumer.** | **UID** |
|  | **event-3** | **Select specific sector which the user wants to give complaint on the combobox** | **UID** |
|  | **event-4** | **Write users complain on the text area** | **UID** |
|  | **event-4** | **Click on the send button and the user gets an alert message that the given complaints are sent or not .** | **UIE/OP** |
|  | | | |
| **User-5, Goal-6** | **Description of Goal-6: Consumer can Select the set meeting button for setting meeting with any department** | |  |
| **Workflow:** | **event-1** | **Click on the datepicker for selecting date** | **UID** |
|  | **event-2** | **Choose option for the meeting type by combobox** | **UID/UIE** |
|  | **event-3** | **Write the meeting time on the textfield** | **UID** |
|  | **event-4** | **Write the meeting location on the textfield** | **UID** |
|  | **event-5** | **Choose option for select department on combobox that which department type that user wants to set a meeting.** | **UIE/UID** |
|  | **event-6** | **Give a join meeting link on the text field.** | **UID** |
|  | **event-7** | **Click on the “save” button which set a meeting for this user and users are got a alert message that the meeting is set or not** | **UIE/OP** |
|  | | | |
| **User-5, Goal-7** | **Description of Goal-7: Users can use the Show complain button for seeing the complain information which are given by the user** | |  |
| **Workflow:** | **event-1** | **User can see the selected sector on the textarea** | **OP** |
|  | **event-2** | **User can see the selected date on the textarea** | **OP** |
|  | **event-3** | **Can see the complain that are given by the user on the textarea** | **OP** |
|  | **event-4** | **Can see their given nid number on the textarea** | **OP** |
|  | | | |
| **User-5, Goal-8** | **Description of Goal-8: As a consumer, can See the meeting information on the meeting information button** | |  |
| **Workflow:** | **event-1** | **User can see the meeting type on the table meeting column** | **OP** |
|  | **event-2** | **User can see the meeting location on the table location column** | **OP** |
|  | **event-3** | **User can see the meeting link on the table link column** | **OP** |
|  | **event-4** | **User can see which department set the meeting on the table set by column** | **OP** |
|  | **event-5** | **User can see the meeting time on the table time column** | **OP** |
|  | **event-6** | **User can see the meeting date on the table date column** | **OP** |

| User-6 name: Finance Officer | | | |
| --- | --- | --- | --- |
| **User-6, Goal-1** | **Description of Goal-1: This user goal where Finance Officers manage and give the salary to the employees. And give a budget for specific department and keep record employees salaries are given or not .This site is only for Finance officer (Login by 4 digit id.This id is given by control office)** | | **event type** |
| **Workflow:** | **event-1** | **Login in finance officer site with 4 digit id** | **OP, UID, UIE, VL, VR, DP** |
|  | **event-2** | **Click on the “ Budget Desk” button to give a budget for a department** | **UIE** |
|  | **event-3** | **Click on the “Show Budget” button to see the saved information** | **UIE/OP/DP** |
|  | **event-4** | **Click on the “Budget Chart” button to see the rate of the budget of department** | **UIE** |
|  | **event-5** | **Click on the “Set Meeting ” button to set a Meeting with a department** | **UIE/OP/DP** |
|  | **event-6** | **Click on the “salary” button to give salary to the employee** | **UIE/OP** |
|  | **event-7** | **Click on the “Show salary” button to see information** | **UIE/OP** |
|  | **event-8** | **Click on the “salary pie chart” button to see to see the rate of the salary of employees with their specific id** | **UIE/OP/DP** |
|  | **event-9** | **Click on the “Give Information ” button for giving information to the employees** | **UIE** |
|  | | | |
| **User-6, Goal-2** | **Description of Goal-2: This user goal can where the Finance officer give a budget for specific department** | |  |
| **Workflow:** | **event-1** | **Select date on the datepicker** | **UID** |
|  | **event-2** | **Choose the department by the combobox** | **UID/UIE** |
|  | **event-3** | **Write the amount of departments budget on the textfield** | **UID** |
|  | **event-4** | **Write the amount of departments total income on the textfield** | **UIE** |
|  | **event-5** | **Write the total expense of department on the textfield** | **UIE** |
|  | **event-6** | **Click on the “save” button users are got a alert message that the information is save or not** | **UIE/UID/OP** |
|  | | | |
| **User-6, Goal-3** | **Description of Goal-3: The user goal can see where the Finance officer save all information about department budget** | |  |
| **Workflow:** | **event-1** | **User can see the selected date on the table date column** | **OP** |
|  | **event-2** | **User can see the selected department on the table department column** | **OP** |
|  | **event-3** | **User can see the budget on the table budget column** | **OP** |
|  | **event-4** | **Here user can see the total income for specific department on the table total income column** | **OP** |
|  | **event-5** | **Here user can see the total expense of department on the table total expense column** | **OP** |
|  | | | |
| **User-6, Goal-4** | **Description of Goal-4: This user can give employees salary with their id and can add bonus to a particular employee id.** | |  |
| **Workflow:** | **event-1** | **Select the date on the datepicker** | **UID** |
|  | **event-2** | **Select the employees id by the combobox** | **UIE/UID** |
|  | **event-3** | **Write employees salary on the textfield** | **UID** |
|  | **event-4** | **Write bonus on the textfield** | **UID** |
|  | **event-5** | **Click on the “Give salary “ button for confirming the given salary and bonus . Gets an alert message for confirming salary.** | **UIE/OP** |
|  | | | |
| **User-6, Goal-5** | **Description of Goal-5: This user goal where Finance officer is connected to the employees of all department and able to give information to a particular department** | |  |
| **Workflow:** | **event-1** | **Choose the employees of the department by the combobox** | **UIE/UID** |
|  | **event-2** | **Select the date on the datepicker** | **UID** |
|  | **event-3** | **Write message on the text area** | **UID/OP** |
|  | **event-4** | **Click on the “ Send“ button for sending message to the employees and gets an alert message for confirming that the message are sent or not** | **UIE/OP** |
|  | | | |
| **User-6, Goal-6** | **Description of Goal-6: This user goal can see a particular employee name and the sector about his/her salary is given or not.** | |  |
| **Workflow:** | **event-1** | **User can see the selected date on the table date column** | **OP** |
|  | **event-2** | **Can see the selected employee id on the table id column** | **OP** |
|  | **event-3** | **Can see the given salary on the table salary column** | **OP** |
|  | **event-4** | **Here user Can see the given bonus on the table bonus column** | **OP** |
|  | **event-5** | **Click on the “back ” button for going on dashboard of finance officer** | **UIE/OP** |
|  | | | |
| **User-6, Goal-7** | **Description of Goal-7: This user goal can see rate of the budget about department on “budget pie chart” button** | |  |
| **Workflow:** | **event-1** | **Can see the rate of the budget for specific department** | **OP** |
|  | **event-2** | **Click on the “back” button for going back to the finance officer dashboard** | **OP/UIE** |
|  | | | |
| **User-6, Goal-8** | **Description of Goal-8: This user goal can set meeting with a specific department on the “Set meeting” button** | |  |
| **Workflow:** | **event-1** | **Select date on the datepicker** | **UID** |
|  | **event-2** | **Select meeting type that the meeting is online or offline by the combo box** | **UID** |
|  | **event-3** | **Write meeting time in the text field** | **UID** |
|  | **event-4** | **Write the meeting location in the text field** | **UID** |
|  | **event-5** | **Select meeting set by the combo box** | **UID** |
|  | **event-6** | **Click on the “ Save “ button and get an alert message that the meeting is set or not.** | **UIE** |
|  | **event-7** | **Click on the “back “ button for going back to the finance officer dashboard** | **UIE/OP** |

| User-7 name: District Manager | | | | | |
| --- | --- | --- | --- | --- | --- |
| **User-7, Goal-1** | **Description of Goal-1: As a district manager,this user monitors energy usage within the assigned district.** | | | | **event type** |
| **Workflow:** | **event-1** | **Login procedure for the district manager. If the login is successful then the dashboard for the user will be generated on the screen.** | | | **UID, UIE,PC,VL, VR,DP** |
|  | **event-2** | **Registration procedure will be available in case there is a new user.** | | | **UIE** |
|  | **event-3** | **The user's login and registration fields will be checked through the database and validated. If any fields are missing, the user will get a pop-up on the missing fields.** | | | **OP,DP** |
|  | **event-4** | **The user can access all the information through the homepage.** | | | **UIE** |
|  | | | | | |
| **User-7, Goal-2** | **Description of Goal-2:The user can provide assistance and guidance to energy departments or consumers using meeting** | | | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password** | | | **UIE** |
|  | **event-2** | **Navigate to set meeting if there is any problem or issues with the existing data of consumers or energy departments** | | | **UID** |
|  | **event-3** | **Set meeting if meeting is online or offline** | | | **UIE,PC,DP,VR,OP** |
|  | **event-4** | **Set meeting time** | | | **UIE** |
|  | **event-5** | **Set url/location for online offline meeting** | | |  |
|  | | | | | |
| **User-7, Goal-3** | **Description of Goal-3:This user can search for and join existing meeting and join them using Join meeting button** | | | |  |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password** | | | **UIE** |
|  | **event-2** | **Navigate to Join meeting button to search for meetings** | | | **OP, DP** |
|  | **event-3** | **It show alert if there is any meeting to day by any user** | | | **UID,DP** |
|  | **event-4** | **Select specific date for meeting searching** | | | **UIE,DP,OP** |
|  | **event-5** | **Check meeting location ,link in the box** | | | **UIE** |
|  | | | | | |
| **User-7, Goal-4** | **Description of Goal-4: The user support legal proceedings, cases violations or provide legal aid** | | | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password** | | | **UIE** |
|  | **event-2** | **Navigate to the "Case list" section in the system** | | | **UID** |
|  | **event-3** | **Access the list of pending legal cases.** | | | **UIE,DP,OP** |
|  | **event-4** | **Select a legal case from the list to remove if it's solved through mediating between energy department and consumers.** | | | **UIE** |
|  | **event-5** | **file a case of any flawed data found in consumer or energy department information.** | | |  |
|  | | | | | |
| **User-7, Goal-5** | **Description of Goal-5: The user can have feedbacks and complaints of energy related disputes within the district.** | | | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password.** | | | **UIE** |
|  | **event-2** | **Navigate to the "file a Complaint" section in the system** | | | **DP,OP** |
|  | **event-3** | **Review and prioritize the complaints and write a complaint against any employee or consumer or energy department.** | | | **UID, UIE,** |
|  | **event-4** | **Select consumer or energy department id .** | | | **DP,OP** |
|  | **event-5** | **Write a summary of the complaint .** | | | **UIE** |
|  | | | | | |
| **User-7, Goal-6** | **Description of Goal-6: The user can file a case on behalf of the consumer for issues such as energy consumption dispute** | | | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password.** | | | **UIE** |
|  | **event-2** | **Navigate to file a case.** | | | **DP,OP** |
|  | **event-3** | **Write a case summary.** | | | **UIE** |
|  | **event-4** | **Write consumer or department name.** | | |  |
|  | **event-5** | **Submit cases to monitor and mediate issues** | | |  |
|  | | | | | |
| **User-7, Goal-7** | **Description of Goal-7: The user provides submit a leave request to gain time to verify case issues** | | | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password.** | | | **UIE** |
|  | **event-2** | **Navigate to the Leave Request button** | | | **DP, OP** |
|  | **event-3** | **Select ID depending on the Lawyer** | | | **UID, UIE, DP,OP** |
|  | **event-4** | **Write a summary in the summary section for specifics** | | | **UIE** |
|  | **event-5** | **Write in detail in the body section about the reason for the leave request.** | | |  |
|  | | | | | |
| **User-7, Goal-8** | **Description of Goal-8: The user can update all the data the management has in store** | | | | **event type** |
| **Workflow:** | **event-1** | **Log in to the system using a 4-digit ID and password.** | | | **UIE** |
|  | **event-2** | **Navigate to the "Get consumer information" section in the system** | | | **UIE** |
|  | **event-3** | **Select id according to land owner information** | | | **UID,UIE,OP,DP** |
|  | **event-4** | **Check consumer data** | | | **DP,OP** |
|  | **event-5** | **Analysis the consumer data and energy department data if its complete and authentic** | | | **UIE** |

| User-8 name: Government Authorities | | | | | |
| --- | --- | --- | --- | --- | --- |
| **User-8, Goal-1** | **Description of Goal-1: As a government authorities, this user checks all the functioning of the energy regulatory commission at a national level.** | | | | **event type** |
| **Workflow:** | **event-1** | **Login procedure for the government authority user. Upon successful login, the dashboard displaying regulatory functions is generated.** | | | **UID, UIE,PC,VL, VR,DP** |
|  | **event-2** | **Registration procedure available for new users to create accounts with proper authorization.** | | | **UIE** |
|  | **event-3** | **User can access all functionalities after successful login and registration.** | | | **UID** |
|  | **event-4** | **Logout option allows the user to securely exit the system when the session is complete.** | | | **UIE,PC,DP,OP,VR** |
|  | **event-5** | **Monitoring tools track key performance indicators and regulatory compliance metrics on the dashboard.** | | | **UIE** |
|  | | | | | |
| **User-8, Goal-2** | **Description of Goal-2: The user can implement policies and regulations to ensure fair and efficient energy distribution and usage.** | | | | **event type** |
| **Workflow:** | **event-1** | **Login procedure for access to policy and regulation management interface.** | | | **UIE** |
|  | **event-2** | **Registration procedure available for new users to create accounts with proper authorization.** | | | **DP,OP** |
|  | **event-3** | **User can access and modify policies and regulations after successful login and registration.** | | | **UIE** |
|  | **event-4** | **Logout option allows the user to securely exit the system when the session is complete.** | | |  |
|  | **event-5** | **Monitoring and enforcement mechanisms ensure compliance with established policies and regulations.** | | |  |
|  | | | | | |
| **User-8, Goal-3** | **Description of Goal-3: The user can collaborate with other government agencies.** | | | | **event type** |
| **Workflow:** | **event-1** | **Login procedure for access to collaboration platform with other government agencies.** | | | **UIE** |
|  | **event-2** | **Registration procedure available for new users to create accounts with proper authorization.** | | | **UID,UIE,DP,OP** |
|  | **event-3** | **User can initiate and participate in cross-agency collaborations after successful login and registration.** | | | **UIE** |
|  | **event-4** | **Logout option allows the user to securely exit the system when the session is complete.** | | |  |
|  | **event-5** | **Regular updates and progress reports on collaborative projects and initiatives.** | | |  |
|  | | | | | |
| **User-8, Goal-4** | **Description of Goal-4: The user goal where the authorities can monitor and evaluate the performance of energy suppliers.** | | | | **event type** |
| **Workflow:** | **event-1** | **Login procedure for access to performance metrics and reports for energy suppliers.** | | | **UIE** |
|  | **event-2** | **Registration procedure available for new users to create accounts with proper authorization.** | | | **UIE** |
|  | **event-3** | **User can evaluate supplier performance after successful login and registration.** | | | **UID,UIE,DP,OP** |
|  | **event-4** | **Logout option allows the user to securely exit the system when the session is complete.** | | | **DP,OP** |
|  | **event-5** | **Mechanisms for providing feedback and incentives to energy suppliers.** | | | **UIE** |
|  | | | | | |
| **User-8, Goal-5** | **Description of Goal-5: The user goal where the authorities report systemic issues** | | | | **event type** |
| **Workflow:** | **event-1** | **Login procedure for access to the reporting channel for systemic issues.** | | | **UIE** |
|  | **event-2** | **Registration procedure available for new users to create accounts with proper authorization.** | | | **DP,OP** |
|  | **event-3** | **User can submit reports on systemic issues after successful login and registration.** | | | **UID, UIE,** |
|  | **event-4** | **Logout option allows the user to securely exit the system when the session is complete.** | | | **DP,OP** |
|  | **event-5** | **Transparent communication of actions taken to mitigate reported systemic issues.** | | | **UIE** |
| **User-8, Goal-6** | **Description of Goal-6:The user goal where the authorities can engage with the employees and management.** | | | | **event type** |
| **Workflow:** | **event-1** | **Login procedure for access to employee engagement tools and resources.** | | | **UIE** |
|  | **event-2** | **Registration procedure available for new users to create accounts with proper authorization.** | | | **UID** |
|  | **event-3** | **User can engage with employees and management after successful login and registration.** | | | **UIE,DP,OP** |
|  | **event-4** | **Logout option allows the user to securely exit the system when the session is complete.** | | | **UIE** |
|  | **event-5** | **Recognition and reward systems to incentivize employee engagement and performance.** | | |  |
|  | | | | | |
| **User-8, Goal-7** | **Description of Goal-7:The user goal where the authorities can remove or stop any employees by reporting and blocking access to the system.** | | | | **event type** |
| **Workflow:** | **event-1** | **Login procedure for access to administrative privileges for managing user accounts.** | | | **UIE** |
|  | **event-2** | **Registration procedure available for new users to create accounts with proper authorization.** | | | **UID, UIE,DP** |
|  | **event-3** | **User can report and block unauthorized user access after successful login and registration.** | | | **UIE** |
|  | **event-4** | **Logout option allows the user to securely exit the system when the session is complete.** | | |  |
|  | **event-5** | **suspension or termination of user accounts as necessary.** | | |  |
|  | | | | | |
| **User-8, Goal-8** | **Description of Goal-8: The user can give feedback on the workings of the whole system**. | | | | **event type** |
| **Workflow:** | **event-1** | **Login procedure for access to the feedback mechanism for providing system-wide feedback.** | | | **UIE** |
|  | **event-2** | **Registration procedure available for new users to create accounts with proper authorization.** | | | **OP, DP** |
|  | **event-3** | **User can submit feedback on system workings after successful login and registration.** | | | **UIE** |
|  | **event-4** | **Logout option allows the user to securely exit the system when the session is complete** | | |  |
|  | **event-5** | **Transparent communication of actions taken in response to user feedback.** | | |  |