

# User Requirements Document(URD)

~By team

Tech Wizards

## ROAD REPAIR AND TRACKING SOFTWARE

---

### Purpose

The purpose of this document is to define the requirements for the development of the Road Repair and Tracking System(RRTS). The system is to be developed as an Online Portal for record keeping activities associated with the road repairing task of the Public Works Department of the Corporation of any large city.

### Scope

The RRTS will automate road repair requests, prioritization, and scheduling based on resource availability and road conditions. It allows for dynamic rescheduling when resources change. The system will provide reports on repair progress and resource use for city officials. It aims to improve the efficiency of the Public Works Department's road repair operations.

### Intended audience

- 1) **City Corporation Administrators:** Oversee resource management and ensure efficient scheduling of road repairs.
- 2) **Supervisors in the Public Works Department:** Inspect road conditions, determine priorities, and allocate resources for repairs.
- 3) **Clerks/Support Staff:** Enter complaint data into the system and generate reports for supervisors.
- 4) **City Mayor and Senior Officials:** Use the software's reporting features to make informed decisions and communicate with the public.
- 5) **IT Department:** Implement, maintain, and troubleshoot the software for optimal performance.
- 6) **Residents of the City:** Indirect stakeholders who benefit from improved road repair services through the system.

## Product Vision Statement

The vision of RRTS is to streamline the city's road repair process through automated complaint management, prioritization, and resource allocation. It aims to provide real-time data for effective decision-making and enhance service delivery, ensuring safer roads for residents.

## Technologies

HTML,CSS,JAVASCRIPT,ADVANCED JAVA

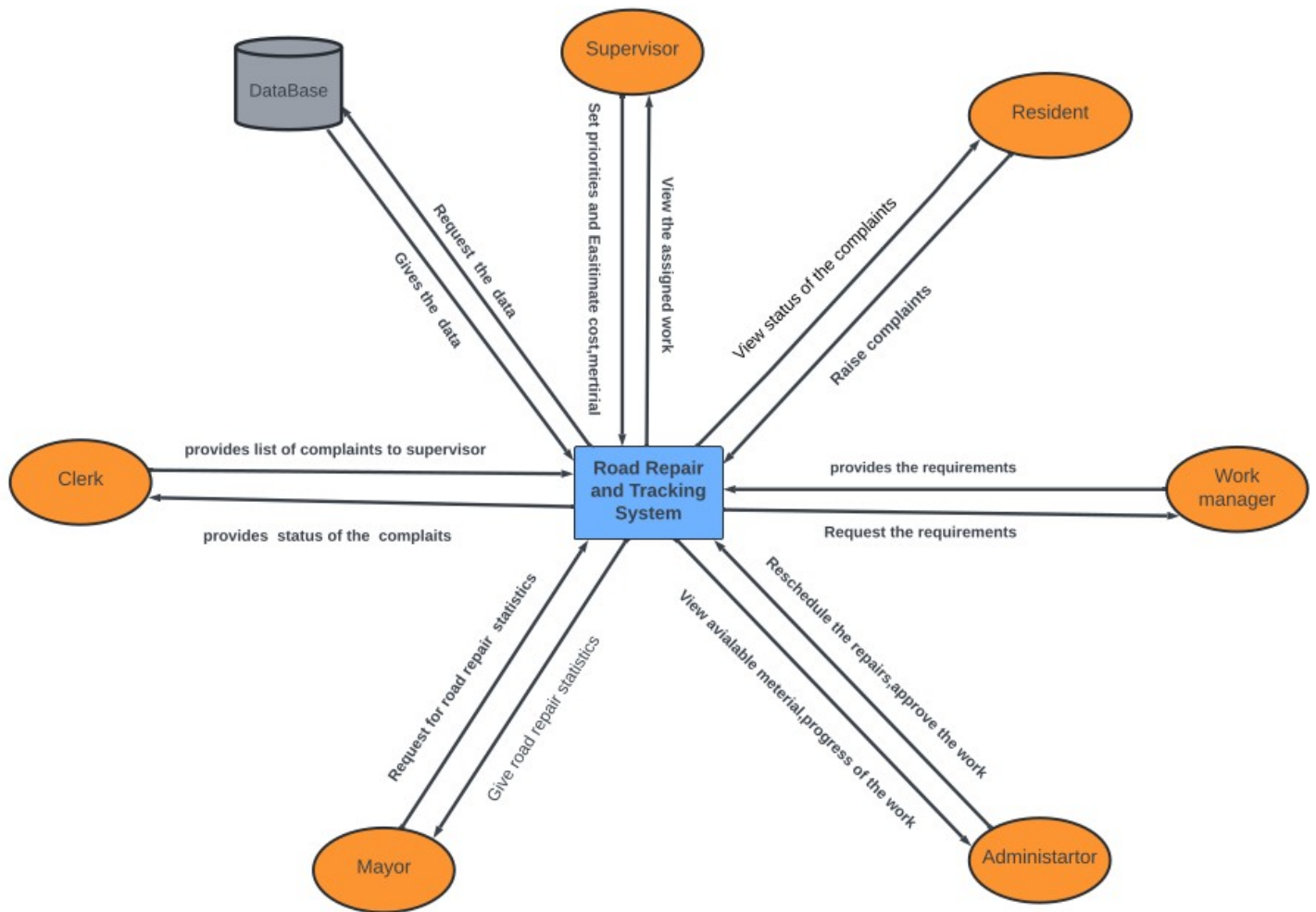
## System in Context

The system context for the Road Repair and Tracking Software (RRTS) includes the interaction between various stakeholders and the software components. The system will interface with the following

1. **Residents:** Submit road repair complaints via phone or written form, entered into the system by clerks.
2. **Clerks/Support Staff:** Input complaints into the RRTS and generate daily reports for supervisors.
3. **Supervisors:** Assess road conditions, set repair priorities, and estimate required resources using the system.
4. **City Corporation Administrators:** Manage resource availability (manpower, machinery) and monitor repair schedules.
5. **RRTS Database:** Stores complaints, resource data, schedules, and historical repair records.
6. **Reporting Module:** Generates reports for supervisors, administrators, and city officials.
7. **City Mayor and Senior Officials:** Access the system to view repair statistics and resource utilization reports.

The system operates within the city's existing IT infrastructure, integrating with other municipal services and ensuring data security and scalability

## CONTEXT DIAGRAM



## User Characteristics:

Users must know how to securely log in, navigate the interface, and utilize the features relevant to their role.

## Constraints:

N/A

## System Wide Requirements(Received):

## Actors:

The System Interacts with 6 kinds of users. Each User has its own functions to access with System. The functionalities of users are dependent on each other.

## Events:

**RRTS** Tool is a multi user System which provides the Road Repair and Tracking according to user complaints

The most critical events for the software are:

1. **New Complaint Submission:** Initiates the process of logging and addressing new road issues.
2. **Assessment Completion:** Marks the evaluation of reported issues by a supervisor.
3. **Repair Scheduling:** Activates the scheduling and resource allocation for repairs.
4. **Repair Progress Update:** Provides status updates on ongoing repairs.
5. **Report Generation:** Creates reports and statistics for analysis and decision-making.

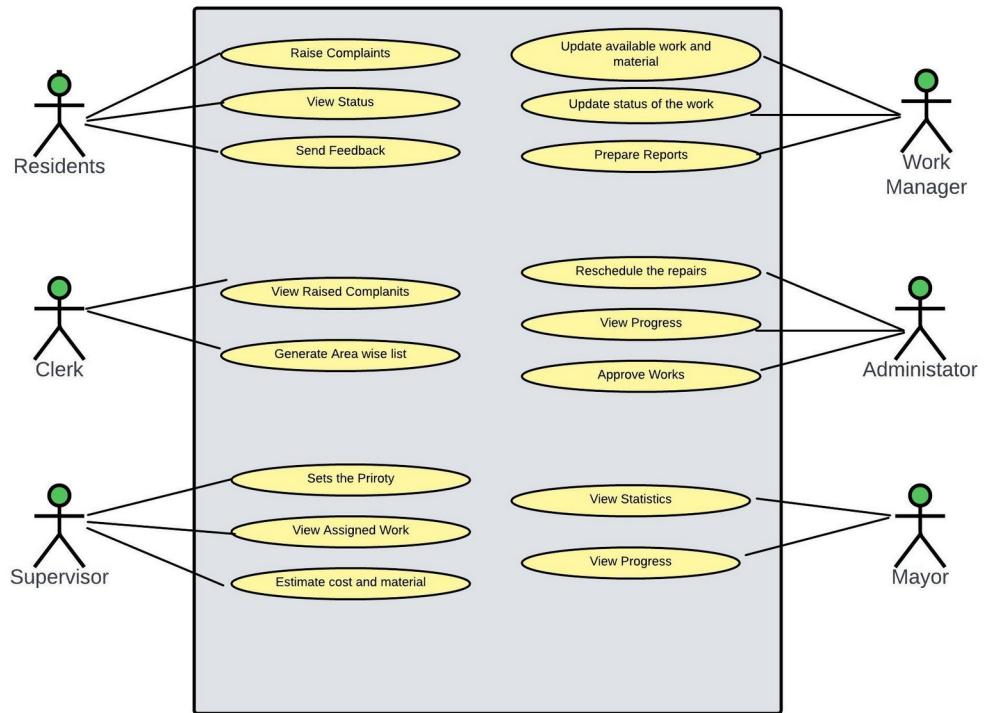
The below table provides a set of user visible events that define the functionalities that are in RRTS Tool.

Actor	Action	Object	Frequency	Arrival Pattern	Response
Resident	Logs into	System	Daily	Episodic	Gets access to dashboard based on role
Resident	Submits	Repair Complaint	Occasional	Episodic	Complaint logged with unique ID
Resident	Views	Complaint Status	Occasional	Episodic	Status of repair displayed
Clerk	Views	Complaints	Daily	Episodic	Receives list of new complaints
Clerk	Approves	Complaints	Daily	Episodic	Complaints approved and forwarded
Supervisor	Examines	Complaint Details	Daily	Episodic	Determines priorities and resource needs
Supervisor	Allocates	Resources	Daily	Episodic	Resources

Supervisor	Sers	Priorities	Daily	Episodic	allocated for repairs
Supervisor	Updates	Repair Status	Daily	Episodic	Priorities set for repair tasks
Workmen	Updates	Available Resources	Weekly	Episodic	Repair status updated in system
Workmen	Requests	Repair Schedule	Occasional	Episodic	Resource availability updated in system
Administrator	Updates	Available Resources	Weekly	Episodic	All complaints displayed for review
Administrator	Views	All complaints	Daily	Episodic	Schedule requests or rescheduled
Mayor	Views	Statistics report	Monthly	Periodic	Resource availability updated in system
Mayor	Requests	Explanational	Occasional	Episodic	All complaints displayed for review
Mayor	Withdraws	Explanation Requests	Rare	Episodic	Receives compiled statistics on repairs
					D

## USECASE DIAGRAM

## Road Repair and Tracking Sysyem(RRTS)



Text

## Functional Requirements

### Use Case Overview Table

Use Case Id	Use Case Name	Priority	Stability	Verifiability
UC-RRTS-RRC	Raise Repair Complaints	low	Stable	Verifiable
UC-RRTS-VS	View Status	low	Stable	Verifiable
UC-RRTS-WTC	Withdraw Thier Complaints	low	Stable	Verifiable
UC-RRTS-VC	View Complaints	low	Stable	Verifiable
UC-RRTS-AC	Approve Complaints	high	Stable	Verifiable
UC-RRTS-EC	Examine Complaints	high	Stable	Verifiable
UC-RRTS-SP	Set Prorities	high	Stable	Verifiable
UC-RRTS-AR	Allocate Resources	high	Stable	Verifiable
UC-RRTS-USR	Update Status of Repair	medium	Stable	Verifiable
UC-RRTS-USW	Update Status Of Work	high	Stable	Verifiable
UC-RRTS- RSARRW	Request Schedule And Reschedule Repair Work	high	Stable	Verifiable
UC-RRTS-WRR	Withdraw Reschedule Request	medium	Stable	Verifiable
UC-RRTS-VAC	View All Complaints	medium	Stable	Verifiable
UC-RRTS-UAR	Update Available Resources	high	Stable	Verifiable
UC-RRTS-VSR	View Statistics Report	medium	Stable	Verifiable
UC-RRTS-AFE	Ask For Explanation	high	Stable	Verifiable
UC-RRTS-WE	WithDraw Explanation	high	Stable	Verifiable
UC-RRTS-LI	Login	low	Stable	Verifiable

### Use Case Specifications:

#### 1. UC-RRTS-RRC : Raise Repair Complaint

Use case Id: UC-RRTS-RRC	Use-Case-Name:Raise Repair Complaint
Description	A resident submits a new road repair complaint



	to the city corporation.
Preconditions	<p>The resident must identify a road needing repair.</p> <p>The city corporation system must be operational.</p> <p>The resident must have a way to contact the city corporation (e.g., phone, written complaint).</p>
PostConditions	<p>The complaint is successfully logged into the system with a unique reference ID.</p> <p>The complaint details are recorded for future processing and scheduling.</p>
Main Flow	<p>The resident contacts the city corporation and submits a repair complaint.</p> <p>The clerk logs the complaint details into the system and generates a unique complaint ID.</p> <p>The system records the complaint and confirms receipt to the resident.</p>
Alternative Flow	<p><b>Incomplete Information:</b> If the complaint details are incomplete, the clerk requests additional information from the resident before logging the complaint.</p> <p><b>System Unavailable:</b> If the system is down, the clerk records the complaint manually and enters it into the system later.</p>
Frequency of use	High
Frequency of Occurrence	Daily

## 2 . UC-RRTS-VS : View Status

Use case Id:UC-RRTS-VS	Use-Case-Name: View Status
Description	A resident checks the status of their submitted road repair complaint.
Preconditions	<p>The resident must have a valid complaint reference number.</p> <p>The complaint must be logged in the system.</p> <p>The system must be operational.</p>
PostConditions	The resident receives the current status of their

	<p>complaint.</p> <p>The system displays the latest updates or actions taken on the complaint.</p>
Main Flow	<p>The resident logs into the system or contacts the city corporation with their complaint reference number.</p> <p>The system retrieves the status of the complaint using the reference number.</p> <p>The system displays the complaint status and any relevant updates to the resident.</p>
Alternative Flow	<p><b>Invalid Reference Number:</b> If the reference number is invalid, the system informs the resident and prompts them to provide a correct number.</p> <p><b>System Unavailable:</b> If the system is down, the resident is informed and advised to check back later or contact the city corporation directly.</p>
Frequency of use	Medium
Frequency of Occurrence	Weekly

### 3. UC-RRTS-WTC : With Draw Their Complaints

Use case Id : UC-RRTS-WTC	Use-Case-Name:Withdraw their complaint
Description	A resident withdraws a previously lodged road repair complaint from the system.
Preconditions	<p>1.The complaint must be logged in the system.</p> <p>2.The resident must provide valid identification or a complaint reference number.</p> <p>3.The complaint should not be already under active repair or completed.</p>
PostConditions	<p>The complaint is successfully marked as withdrawn and removed from any scheduled repair lists.</p> <p>A withdrawal confirmation is generated and provided to the resident.</p>
Main Flow	The resident requests to withdraw their

	<p>complaint and provides the complaint reference number.</p> <p>The clerk verifies the complaint details and initiates the withdrawal in the system.</p> <p>The system marks the complaint as withdrawn and updates relevant records.</p>
Alternative Flow	If the complaint is already under repair or the provided details are invalid, the system denies the withdrawal request.
Frequency of use	Low
Frequency of Occurrence	Occasionally

#### 4.UC-RRTS-VC : View Complaints

Use case Id:UC-RRTS-VC	Use-Case-Name: View Complaints
Description	A clerk views the list of logged road repair complaints for processing and management.
Preconditions	<p>The clerk must be logged into the system with appropriate access rights.</p> <p>Complaints must be logged in the system.</p>
PostConditions	<p>The clerk reviews and accesses the list of complaints.</p> <p>The clerk can process, update, or assign the complaints as needed.</p>
Main Flow	<p>The clerk logs into the system using their credentials.</p> <p>The clerk navigates to the complaints management section.</p> <p>The system displays a list of all logged complaints, including relevant details for each.</p>
Alternative Flow	<p><b>System Error:</b> If the system encounters an error, the clerk is notified and advised to try again later or contact technical support.</p> <p><b>No Complaints:</b> If there are no complaints logged, the system informs the clerk and provides an option to view previous records or</p>

	check back later.
Frequency of use	High
Frequency of Occurrence	Daily

## 5. UC-RRTS-AC: Approve Complaints

Use case Id:UC-RRTS-AC	Use-Case-Name: Approve Complaints
Description	A clerk reviews and approves road repair complaints for further action and processing.
Preconditions	<p>The clerk must be logged into the system with appropriate access rights.</p> <p>Complaints must be logged in the system and pending approval.</p>
PostConditions	<p>Approved complaints are marked for further processing and scheduling.</p> <p>The system updates the complaint status to reflect approval.</p>
Main Flow	<p>The clerk logs into the system and navigates to the pending complaints section.</p> <p>The clerk reviews each complaint and verifies its details.</p> <p>The clerk approves the complaint, and the system updates the status to "Approved" and queues it for scheduling.</p>
Alternative Flow	<p><b>Incomplete Details:</b> If the complaint details are incomplete, the clerk requests additional information before approval.</p> <p><b>System Issue:</b> If the system is down or encounters an error, the clerk is notified and advised to retry or contact technical support.</p>

Frequency of use	Medium
Frequency of Occurrence	Daily

## 6.UC-RRTS-EC : Examine Complaints

Use case Id:UC-RRTS-EC	Use-Case-Name: Examine Complaints
Description	A supervisor inspects the details of road repair complaints to assess severity and prioritize actions.
Preconditions	<p>The supervisor must be logged into the system with appropriate access rights.</p> <p>Complaints must be logged and approved in the system.</p>
PostConditions	<p>The supervisor assesses and prioritizes complaints based on severity.</p> <p>The system updates the complaint status and assigns priorities.</p>
Main Flow	<p>The supervisor logs into the system and accesses the list of approved complaints.</p> <p>The supervisor reviews each complaint, examining details and road conditions.</p> <p>The supervisor assesses the severity of the complaints, prioritizes them, and updates their status in the system.</p>
Alternative Flow	<p><b>Incomplete Information:</b> If the complaint details are insufficient for assessment, the supervisor requests additional information or clarification.</p> <p><b>System Issue:</b> If the system is down or encounters errors, the supervisor is notified and may need to reschedule the examination or contact technical support.</p>
Frequency of use	Medium
Frequency of Occurrence	Daily

## 7. UC-RRTS-AR : Allocate Resources

Use case Id:UC-RRTS-AR	Use-Case-Name: Allocate Resources
Description	A supervisor assigns resources (manpower, machines, materials) to road repair complaints based on priority and requirements.
Preconditions	<p>The supervisor must be logged into the system with appropriate access rights.</p> <p>Complaints must be assessed and prioritized.</p> <p>Resource availability must be updated in the system.</p>
PostConditions	<p>Resources are allocated to the approved and prioritized complaints.</p> <p>The system updates resource assignments and schedules the repair work accordingly.</p>
Main Flow	<p>The supervisor logs into the system and reviews the list of prioritized complaints.</p> <p>The supervisor determines the required resources for each complaint, including manpower, machines, and materials.</p> <p>The supervisor allocates the resources to the complaints and updates the system with the assignment details.</p>
Alternative Flow	<p><b>Insufficient Resources:</b> If resources are insufficient, the supervisor re-prioritizes the complaints or adjusts the resource allocation.</p> <p><b>System Issue:</b> If the system is down or encounters errors, the supervisor is notified and may need to manually track resource allocation or contact technical support.</p>
Frequency of use	Medium
Frequency of Occurrence	Daily

## 8.UC-RRTS-SP : Set Priorities

Use case Id:UC-RRTS-SP	Use-Case-Name: Set Priorities
------------------------	-------------------------------

Description	A supervisor sets the priority levels for road repair complaints based on their severity and urgency.
Preconditions	The supervisor must be logged into the system with appropriate access rights.  Complaints must be logged and approved in the system.
PostConditions	Priorities for the complaints are set and updated in the system.  The system adjusts repair schedules and resource allocation based on the new priorities.
Main Flow	The supervisor logs into the system and accesses the list of approved complaints.  The supervisor reviews the details of each complaint and assesses its severity and urgency.  The supervisor sets the priority levels (e.g., high, medium, low) for each complaint and updates the system.
Alternative Flow	<b>Incomplete Information:</b> If the complaint details are insufficient for setting priorities, the supervisor requests additional information or clarification.  <b>System Issue:</b> If the system is down or encounters errors, the supervisor is notified and may need to manually document priorities or contact technical support.
Frequency of use	Medium
Frequency of Occurrence	Daily

## 9. UC-RRTS-USR : Update Status of Repair

Use case Id:UC-RRTS-USR	Use-Case-Name: Update Status of Repair
Description	Give all the above as instructed above , for the use case
Preconditions	The supervisor must be logged into the system

	<p>with appropriate access rights.</p> <p>Repair tasks must be in progress or completed and logged in the system.</p>
PostConditions	<p>The status of the repair tasks is updated in the system.</p> <p>The system reflects the current progress or completion of the repair tasks.</p>
Main Flow	<p>The supervisor logs into the system and accesses the list of ongoing repair tasks.</p> <p>The supervisor reviews the progress of each repair task.</p> <p>The supervisor updates the status (e.g., in progress, completed, pending) in the system.</p>
Alternative Flow	<p><b>Incorrect Status:</b> If the supervisor notices incorrect status information, they correct it and update the system accordingly.</p> <p><b>System Issue:</b> If the system is down or encounters errors, the supervisor is notified and may need to manually track status updates or contact technical support.</p>
Frequency of use	Medium
Frequency of Occurrence	Daily

## 10. UC-RRTS-USW : Update Status of Work

Use case Id:UC-RRTS-USW	Use-Case-Name: Update Status of Work
Description	Workmen update the status of their assigned road repair tasks to reflect current progress.
Preconditions	<p>Workmen must be logged into the system with appropriate access rights.</p> <p>The repair tasks must be assigned and logged in the system.</p>
PostConditions	The status of the repair tasks is updated in the



	<p>system to reflect the current progress.</p> <p>The system provides updated information for tracking and scheduling purposes.</p>
Main Flow	<p>The workmen log into the system and access their assigned repair tasks.</p> <p>The workmen update the status of each task (e.g., started, in progress, completed).</p> <p>The system records the updated status and reflects it in the task management view.</p>
Alternative Flow	<p><b>Incomplete Status:</b> If the status update is incomplete or incorrect, the workmen revise and correct the information before finalizing.</p> <p><b>System Issue:</b> If the system is down or encounters errors, the workmen are notified and may need to manually record updates or contact technical support.</p>
Frequency of use	High
Frequency of Occurrence	Daily, Multiple Times

## 11. UC-RRTS-RSARRW : Requests Schedule & Reschedule Repair Work

Use case Id:UC-RRTS-RSARRW	Use-Case-Name: Requests Schedule & Reschedule Repair Work
Description	Workmen request to schedule or reschedule repair work based on current workload or unforeseen delays.
Preconditions	<p>Workmen must be logged into the system with appropriate access rights.</p> <p>Repair tasks must be logged and the current schedule should be available.</p>
PostConditions	<p>The repair work schedule is updated according to the request.</p> <p>The system reflects the new schedule or rescheduled tasks.</p>
Main Flow	The workmen log into the system and access the

	<p>list of their assigned repair tasks.</p> <p>The workmen submit a request to schedule or reschedule repair work, providing reasons and preferred dates.</p> <p>The system processes the request, updates the repair work schedule, and reflects the changes.</p>
Alternative Flow	<p><b>Conflicting Schedule:</b> If the requested schedule conflicts with existing tasks, the system alerts the workmen and may suggest alternative dates.</p> <p><b>System Issue:</b> If the system is down or encounters errors, the workmen are notified and may need to manually track or document the changes or contact technical support.</p>
Frequency of use	Medium
Frequency of Occurrence	Weekly

## 12. UC-RRTS-WRR: Withdraw Reschedule Request

Use case Id : UC-RRTS-WRR	Use-Case-Name: Withdraw Reschedule Request
Description	Workmen withdraw a previously submitted request to reschedule repair work.
Preconditions	<p>The reschedule request must be logged in the system and pending approval.</p> <p>The workmen must be logged into the system with appropriate access rights.</p>
PostConditions	<p>The reschedule request is withdrawn and removed from the system.</p> <p>The original schedule remains unchanged.</p>
Main Flow	<p>The workmen log into the system and access their pending reschedule requests.</p> <p>The workmen select the request they wish to withdraw and confirm the withdrawal.</p> <p>The system removes the request from the pending list and maintains the original repair schedule.</p>
Alternative Flow	<b>Invalid Request:</b> If the request to withdraw is

	<p>invalid or not found, the system notifies the workmen and prompts them to check the request details.</p> <p><b>System Issue:</b> If the system is down or encounters errors, the workmen are notified and may need to manually document the withdrawal or contact technical support.</p>
Frequency of use	Low
Frequency of Occurrence	Occasionally

### 13. UC-RRTS-VAL : Views All Complaints

Use case Id : UC-RRTS-VAL	Use-Case-Name: Views All Complaints
Description	The administrator views the complete list of logged road repair complaints for oversight and management purposes.
Preconditions	<p>The administrator must be logged into the system with appropriate access rights.</p> <p>Complaints must be logged and available in the system.</p>
PostConditions	<p>The administrator can access and review the complete list of complaints.</p> <p>The system provides the administrator with the ability to filter or search complaints as needed.</p>
Main Flow	<p>The administrator logs into the system using their credentials.</p> <p>The administrator navigates to the complaints management section.</p> <p>The system displays the complete list of logged complaints, including relevant details.</p>
Alternative Flow	<p><b>System Error:</b> If the system encounters an error or is down, the administrator is notified and may need to contact technical support or access complaints through alternative means.</p> <p><b>No Complaints:</b> If there are no complaints</p>

	logged, the system informs the administrator and provides options for viewing historical records or checking back later.
Frequency of use	Medium
Frequency of Occurrence	Daily

#### 14.UC-RRTS-UAR : Update Available Resources

Use case Id: UC-RRTS-UAR	Use-Case-Name: Update Available Resources
Description	The administrator updates the available resources (manpower, machines, materials) in the system to reflect current availability.
Preconditions	The administrator must be logged into the system with appropriate access rights.  Resource data must be available and up-to-date.
PostConditions	The system reflects the updated availability of resources.  Any changes are recorded and used for scheduling and allocation purposes.
Main Flow	The administrator logs into the system using their credentials.  The administrator navigates to the resource management section.  The administrator updates the details of available resources (e.g., manpower, machines, materials) and saves the changes.  The system updates the resource availability records and reflects the changes in scheduling and allocation.
Alternative Flow	<b>Incorrect Data:</b> If the administrator enters incorrect data, the system prompts for correction before finalizing the update.  <b>System Issue:</b> If the system is down or encounters errors, the administrator is notified and may need to manually record updates or

	contact technical support.
Frequency of use	Medium
Frequency of Occurrence	Weekly

## 15. UC-RRTS-VSR : View Statistics Reports

Use case Id : UC-RRTS-VSR	Use-Case-Name:View Statistics Reports
Description	The mayor requests and views various statistics related to road repair activities for oversight and decision-making.
Preconditions	<p>The mayor must be logged into the system with appropriate access rights.</p> <p>The system must have up-to-date data on road repair activities.</p>
PostConditions	<p>The mayor receives the requested statistics report.</p> <p>The system generates and displays the relevant data for the requested period.</p>
Main Flow	<p>The mayor logs into the system using their credentials.</p> <p>The mayor requests specific statistics (e.g., number of repairs, outstanding tasks, resource utilization).</p> <p>The system processes the request, compiles the data, and generates the statistics report.</p> <p>The system displays or provides the report to the mayor.</p>
Alternative Flow	<p><b>Data Unavailable:</b> If the requested data is not available or incomplete, the system notifies the mayor and may offer alternative options or updates.</p> <p><b>System Issue:</b> If the system encounters errors or is down, the mayor is notified and may need to contact technical support or request the report later.</p>

Frequency of use	Low
Frequency of Occurrence	Monthly

## 16. UC-RRTS-AFE : Asks For Explanation

Use case Id: UC-RRTS-AFE	Use-Case-Name: Asks For Explanation
Description	The mayor requests an explanation or clarification regarding specific road repair activities or statistics.
Preconditions	<p>The mayor must be logged into the system with appropriate access rights.</p> <p>Relevant data or activities must be recorded and available in the system</p>
PostConditions	<p>The mayor receives a detailed explanation or clarification.</p> <p>The system or staff provides the requested information or addresses the inquiry.</p>
Main Flow	<p>The mayor logs into the system or contacts the relevant department.</p> <p>The mayor submits a request for an explanation or clarification regarding specific activities or statistics.</p> <p>The system or staff retrieves the necessary information and prepares a detailed response.</p> <p>The explanation or clarification is provided to the mayor.</p>
Alternative Flow	<p><b>Incomplete Information:</b> If the information required for the explanation is incomplete, the staff requests additional details from the mayor before providing a response.</p> <p><b>System Issue:</b> If the system is down or encounters errors, the mayor is notified and may need to wait for technical resolution or contact the department directly.</p>
Frequency of use	Low
Frequency of Occurrence	Monthly

## 17.UC-RRTS-WE : Withdraw Explanation

Use case Id: UC-RRTS-WE	Use-Case-Name:Withdraw Explanation
Description	The mayor withdraws a request for explanation or clarification previously submitted to the system.
Preconditions	<p>The explanation request must be logged and pending action.</p> <p>The mayor must be logged into the system with appropriate access rights.</p>
PostConditions	<p>The explanation request is withdrawn and removed from the system.</p> <p>The system updates records to reflect the withdrawal.</p>
Main Flow	<p>The mayor logs into the system and accesses the list of pending explanation requests.</p> <p>The mayor selects the request they wish to withdraw and confirms the withdrawal.</p> <p>The system removes the request from the pending list and updates the records.</p>
Alternative Flow	<p><b>Invalid Request:</b> If the request to withdraw is invalid or not found, the system notifies the mayor and prompts them to check the request details.</p> <p><b>System Issue:</b> If the system is down or encounters errors, the mayor is notified and may need to manually document the withdrawal or contact technical support.</p>
Frequency of use	Low
Frequency of Occurence	Rarely

## 18. UC-RRTS-LI : Login

Use case Id: UC-RRTS-LI	Use-Case-Name:Login
Description	Users log into the system using their credentials to access various features and functionalities based on their roles.
Preconditions	Users must have valid login credentials (username and password).  The system must be operational and accessible.
PostConditions	Users gain access to the system and are directed to their respective dashboards or home pages based on their roles.  The system records the login activity for security and auditing purposes.
Main Flow	The user accesses the system login page.  The user enters their username and password.  The system validates the credentials and logs the user in.  The user is directed to their respective dashboard or home page based on their role.
Alternative Flow	<b>Incorrect Credentials:</b> If the credentials are incorrect, the system notifies the user and prompts them to re-enter the correct information.  <b>System Issue:</b> If the system is down or encounters errors during login, the user is notified and may need to try again later or contact technical support.
Frequency of use	High
Frequency of Occurrence	Daily



## Non-Functional Requirements

### **Readability:**

- The system must present information clearly and concisely with well-organized screens and reports.

### **Usability:**

- The system should be user-friendly with intuitive navigation and accessible features, supported by training materials and user manuals.

### **Availability:**

- The system should be operational 24/7 with scheduled maintenance communicated in advance to ensure continuous access.

### **Accessibility:**

- The system should support multi-user access and be accessible via desktops, tablets, and smartphones.

### **Performance:**

- The system should provide fast access to information with minimal load times and efficient task processing.

### **Security:**

- The system should implement robust security measures, including user authentication, authorization controls, and data encryption.

### **Platform Compatibility:**

- The system should be compatible with various operating systems and web browsers without requiring significant modifications.