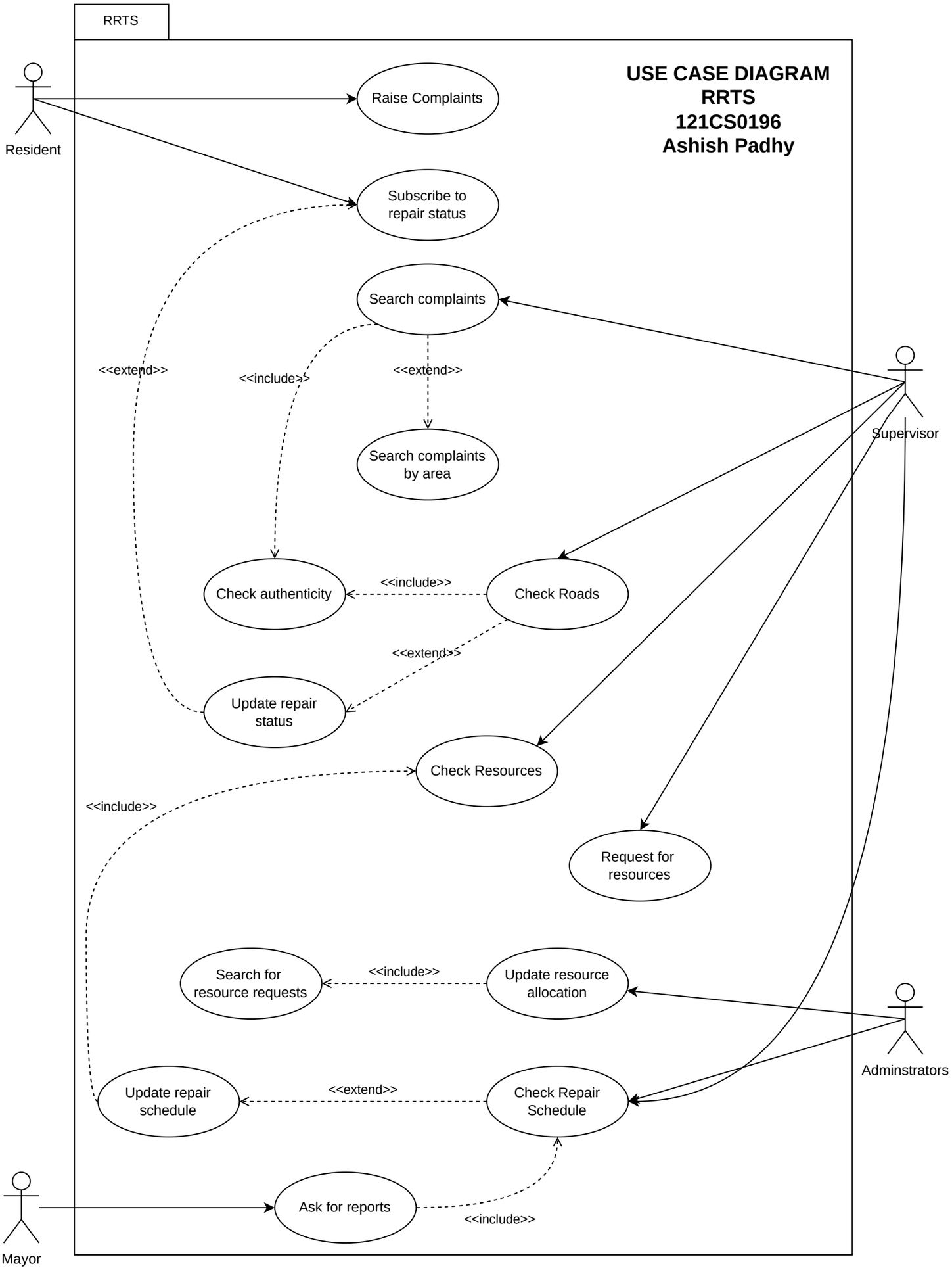
RRTS
USE CASE DIAGRAM
RRTS
121CS0196
Ashish Padhy
Resident
Raise Complaints
Subscribe to repair status
Search complaints
Search complaints by area
<<extend>>
<<include>>
<<extend>>
Supervisor
Check authenticity
<<include>>
Check Roads
<<extend>>
Update repair status
Check Resources
<<include>>
Request for resources
Search for resource requests
<<include>>
Update resource allocation
Adminstrators
Update repair schedule
<<extend>>
Check Repair Schedule
Mayor
Ask for reports
<<include>>

ROAD REPAIR AND TRACKING SYSTEM

By: Ashish Padhy
121CS0196
RRTS

Text

Updates
+ Time: DateTime
+ Report: Report
+ Complaints: List

Report
+ Time: DateTime
+ Resources: List
+ Complaints: List
+ RepairSchedule: RepairSchedule

Users
+ Name: String
+ Username: String
+ Age: Integer
- Phone: String
- Password: String

+ login(username, password)
+ logout()
+ register(name, username, age, phone, password)

Complaints
+ Road: String
+ Description: String
+ Subscription: Boolean
+ Area: Area
+ User: Users
+ Severity: Low | Medium | High
- Status: Pending | InProgress | Completed

- changeStatus(status)
changeSeverity(severity)
+ checkStatus()
+ checkSeverity()

RepairSchedule
+ Time: DateTime
+ Repairs: List

Resources
+ Name: String
+ Quantity: Integer
+ Allocation: Repairs
+ Price: Integer

changeQuantity(quantity)

Residents
+ Area: Area
- Complaints: List
- Updates: List

+ raiseComplaint(road, description, subscription, area, user, severity)
+ getUpdates()

Repairs
+ Status: Pending | InProgress | Completed
+ Priority: Low | Medium | High
+ AssignedTo: Users
+ Area: Area
+ Resources: List
+ Complaints: List

- changeStatus(status)
- changePriority(priority)
+ checkStatus()
+ checkPriority()

Admins
+ Supervisors: List
- Resources: List
- RepairSchedules: List

- allocateResources(name, quantity, allocation, price)
- createRepairSchedule(time, repairs)
- checkResources()
- checkRepairSchedules()
+ checkResourceRequests(supervisor)

Mayor
+ City: String
- Admins: List
+ Reports: List

+ generateReport(time, resources, complaints, repairSchedule)

Supervisors
+ Area: Area
- Repairs: List
- Resources: List
- RepairSchedule: RepairSchedule

+ assignRepairs(status, priority, assignedTo, area, resources, complaints)
+ requestResources(name, quantity, allocation, price)
- checkRepairs()
- checkRepairSchedule()

Area
+ Name: String
+ Address: String
+ Region: String
+ Country: String

+ getResidents()