Software Engineering 2016

FROM LEFT TO RIGHT :-RISHI RAJ SINGH BALOT (14UCS096) , SUDHANSHU SINGH (14UCS128) , VINAYAK KOTHARI(14UCS144), RAHUL CHAWLA (14UCS090), VIKAS SINGH KAVIYA (14UCS143), SHUBHAM SHARMA(14UCS120).

Group ID: B-016- Cleanliness Forum

Screencast video link:https://youtu.be/FPnUuvIDC4I

Demo link: http://hikecoupon.com/test/SWE/project.html

User IDs/Passwords for Demo: Not applicable

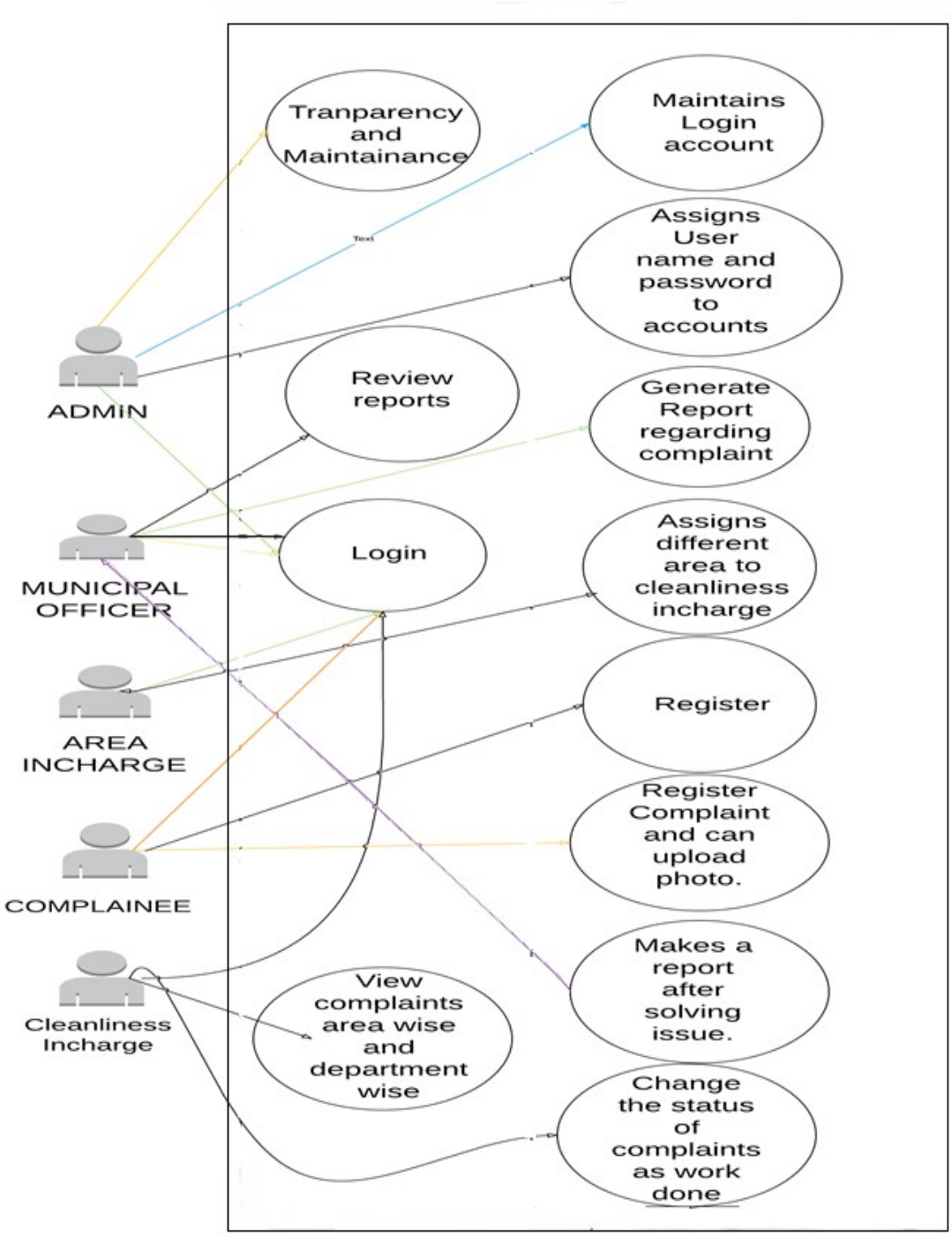
Product Owner: Rahul Chawla and **Scrum Master**: Rishi Raj Singh Balot

System purpose or objective :

1.) To address the grievances of common people regarding cleanliness management.
2.) To make people aware about the best hygienic conditions and make locality clean.
3.) The status of cleanliness would be made public so that public becomes more accountable.
4.) To provide user friendly platform to public where their opinions matter.
5.) To help government authorities to better manage the society and make India clean.
6.) To provide a smooth linking between public and administration.

Use case diagram - Revised

<use case diagram **without** nested boundary>



Product Backlog - Revised

Story ID	As a/an	I want to …	so that …	Priority (H/M/L)
001	Complainee	File new squalor complaint.	My area will be upright.	H
002	Complainee	Check the status of my complaint	I can know about the process of the complaint.	H
003	Complainee	Edit my profile.	I can update my new details .	H
004	Complainee	View complaints related to my area.	I can know the complaints of the area.	L
005	Municipal Officer	See the status of complaint.	I can pass the orders as per needed.	H
006	Municipal Officer	See the reports before and after.	Suggest improvements in way of working.	M
007	Area In charge	See the reports.	I can refer work to cleanliness team.	H
008	Area In charge	Generate the report of the complaints.	I can have clear data of processing of complaints.	M
009	Cleanliness In charge	View the complaints which were allotted to me.	We can clean the area as per registered Complaint.	H
010	Admin	Manage accounts.	Reports can be generated as per area.	L
011	Admin	Allocate municipal officer user name password.	So that every can have unique Id and password.	M

Sprint 3 Plan - Backlog

Story ID	As a/an	I want to …	so that …	Estimate	Actual
001	Complainee	File new squalor complaint.	My area will be upright.	2 -3 Days	2 Days
002	Complainee	Check the status of my complaint.	I can know about the process of the complaint.	3-4 Days	1 Days
004	Municipal Officer	View complaints related to my area.	Suggest improvements in way of working.	1-2 Days	2 Days
006	Area In charge	Generate the report of the complaints.	I can get the work done by the municipal Cleanliness team	2-3 Days	2 Days
008	Cleanliness In charge	See the area's where i need to take my team.	We can clean the area as per registered Complaint.	2 -3 Days	1 Days
010	Admin	Manage accounts.	All accounts should be.	3-4 Days	2 Days
011	Admin	Allocate municipal officer user name password.	So that every can have unique Id and password.	3-5 Days	1 Days

Sprint 3 Plan - Acceptance criteria and test result

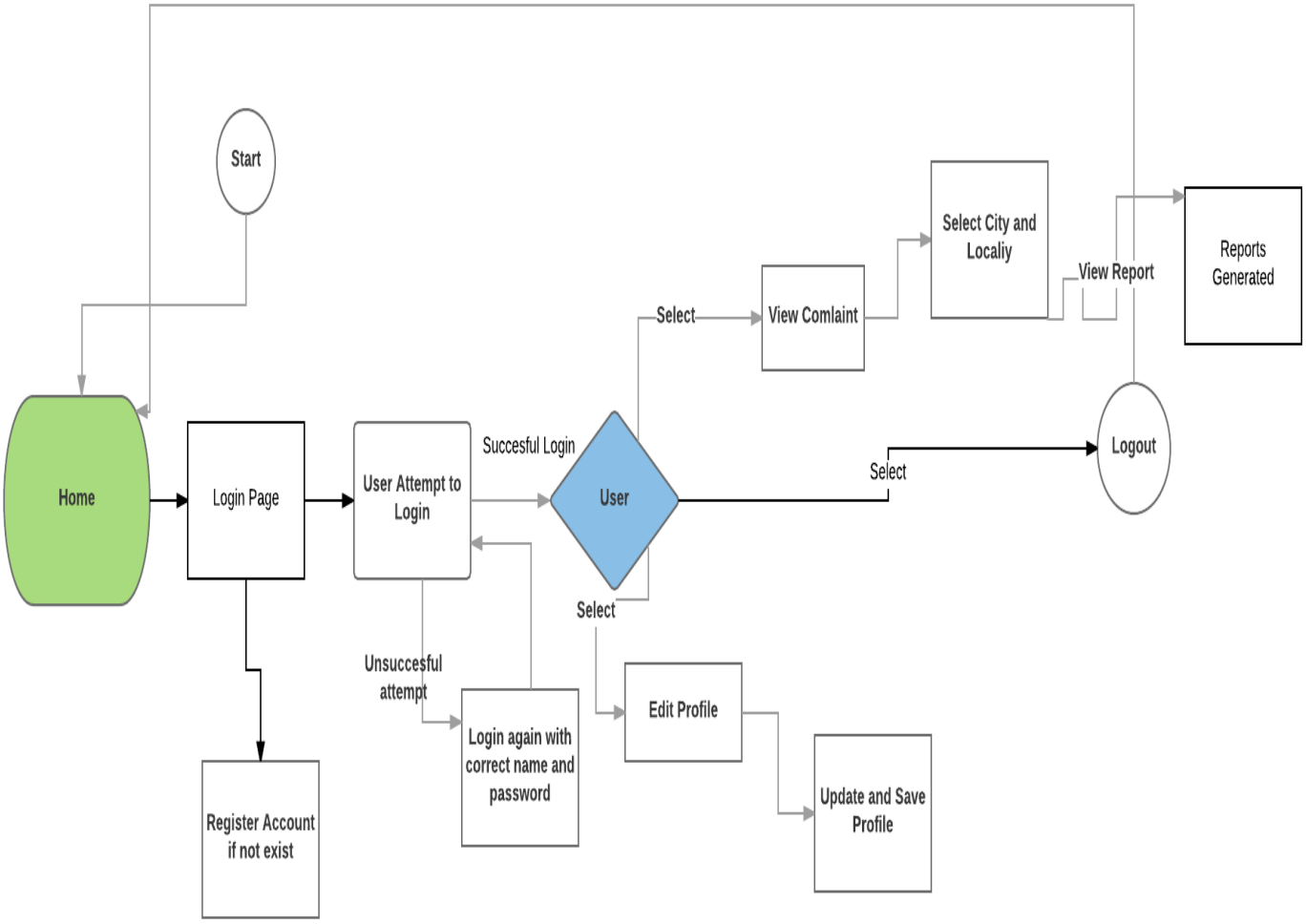
Story ID	Acceptance criteria	Test Result
001	1.) Locality entered should exist. 2.) Negligible Squalor should not be Ignored.	Pending Rejected
004	1.) Area should be valid.	Pending
002	1.) Entered complaint should exist. 2.) Photo should be proper format.	Pending Reject
006	1.) Area should be valid.	Pending
008	1.) Employees should be available.	Pending
012	1.) Municipal officer should exist. 2.) Password should follow the constraints.	Pending

Activity diagrams (Revised to match with your final product)

<Approximately one for each team member with correct notation; diagrams should include business activities/operations – not UI navigation and concepts>

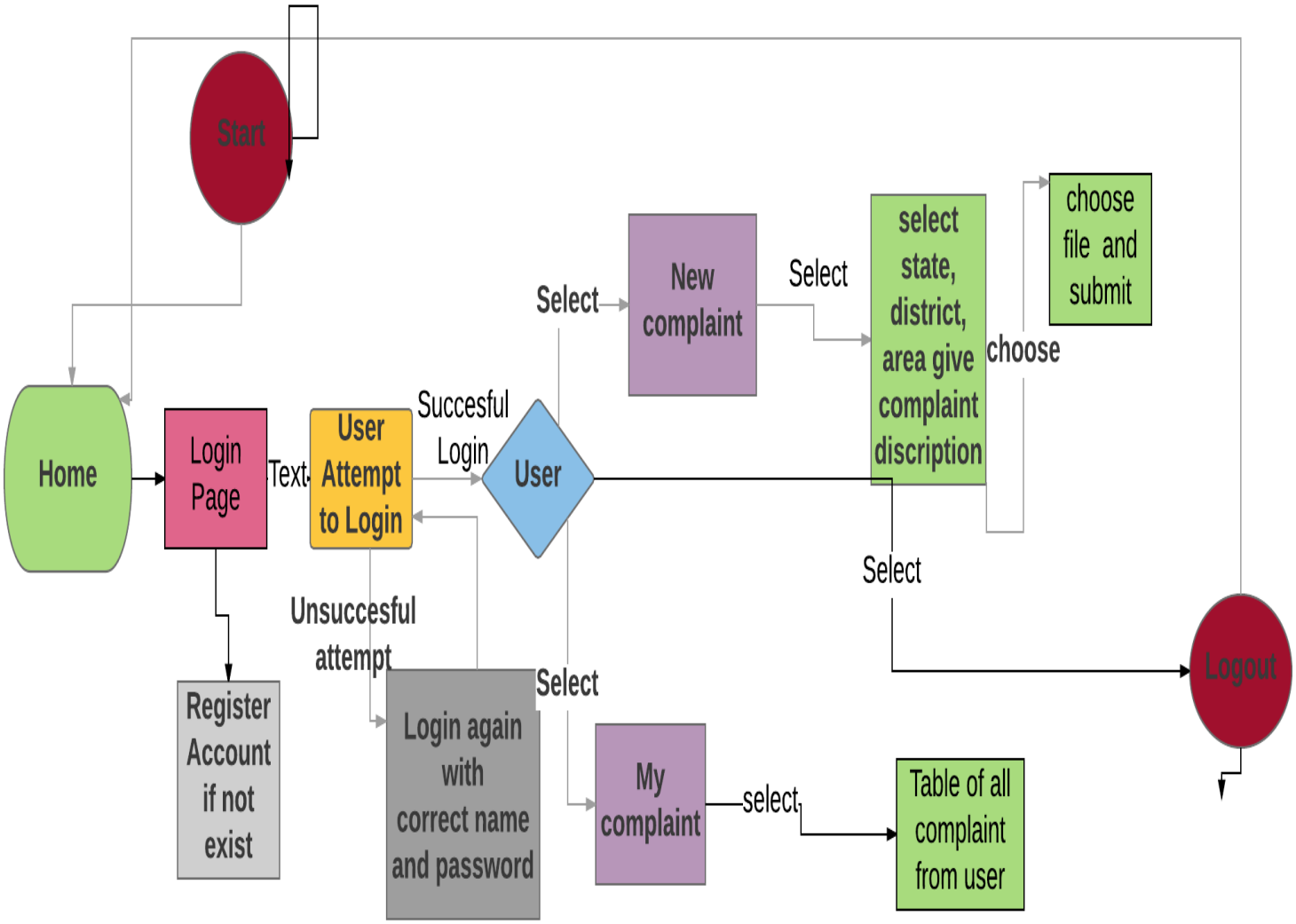
Vinayak Kothari(14UCS144)

VINAYAK KOTHARI

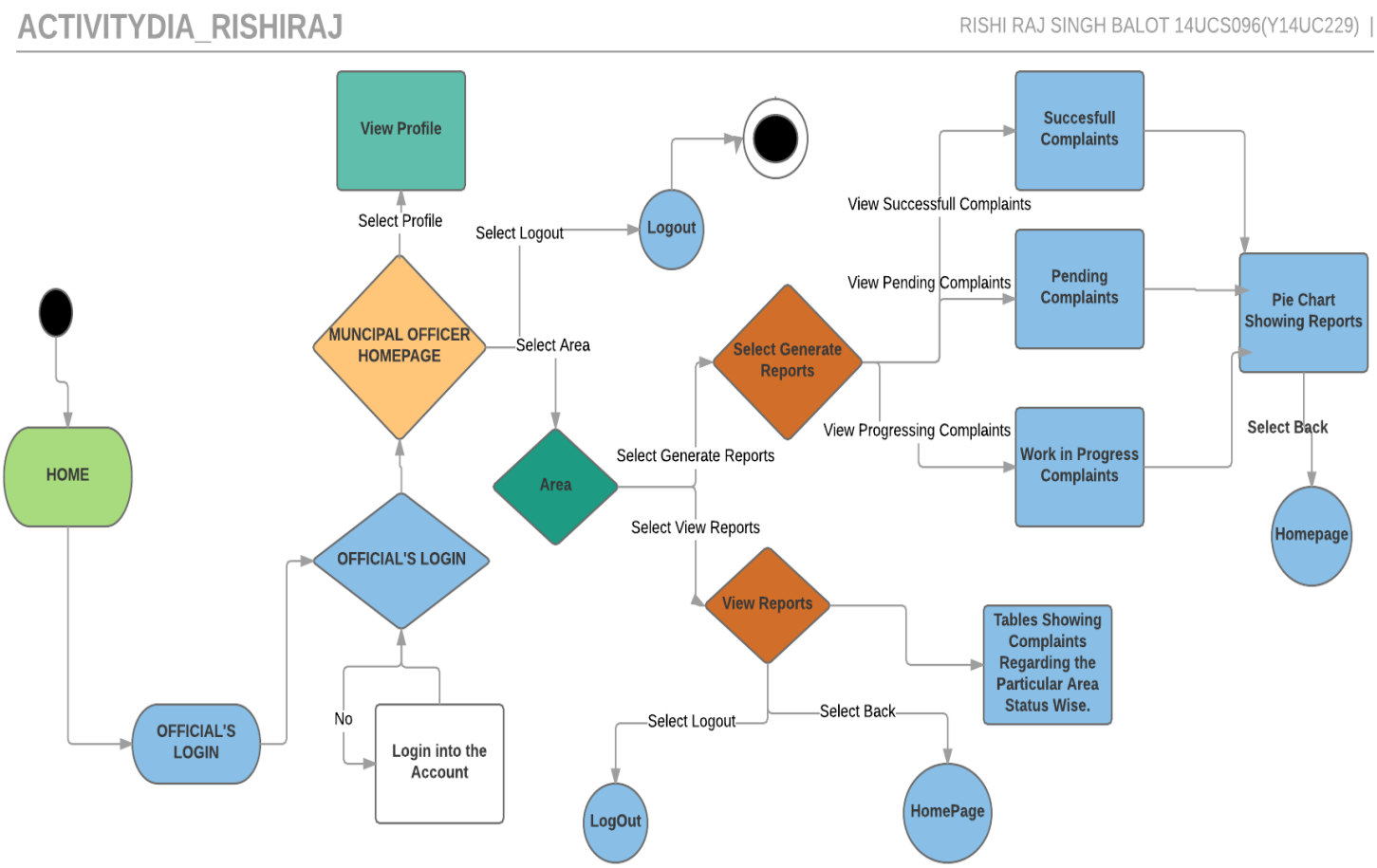


Vikas Singh Kaviya(14UCS143)

VIKAS SINGH KAVIYA

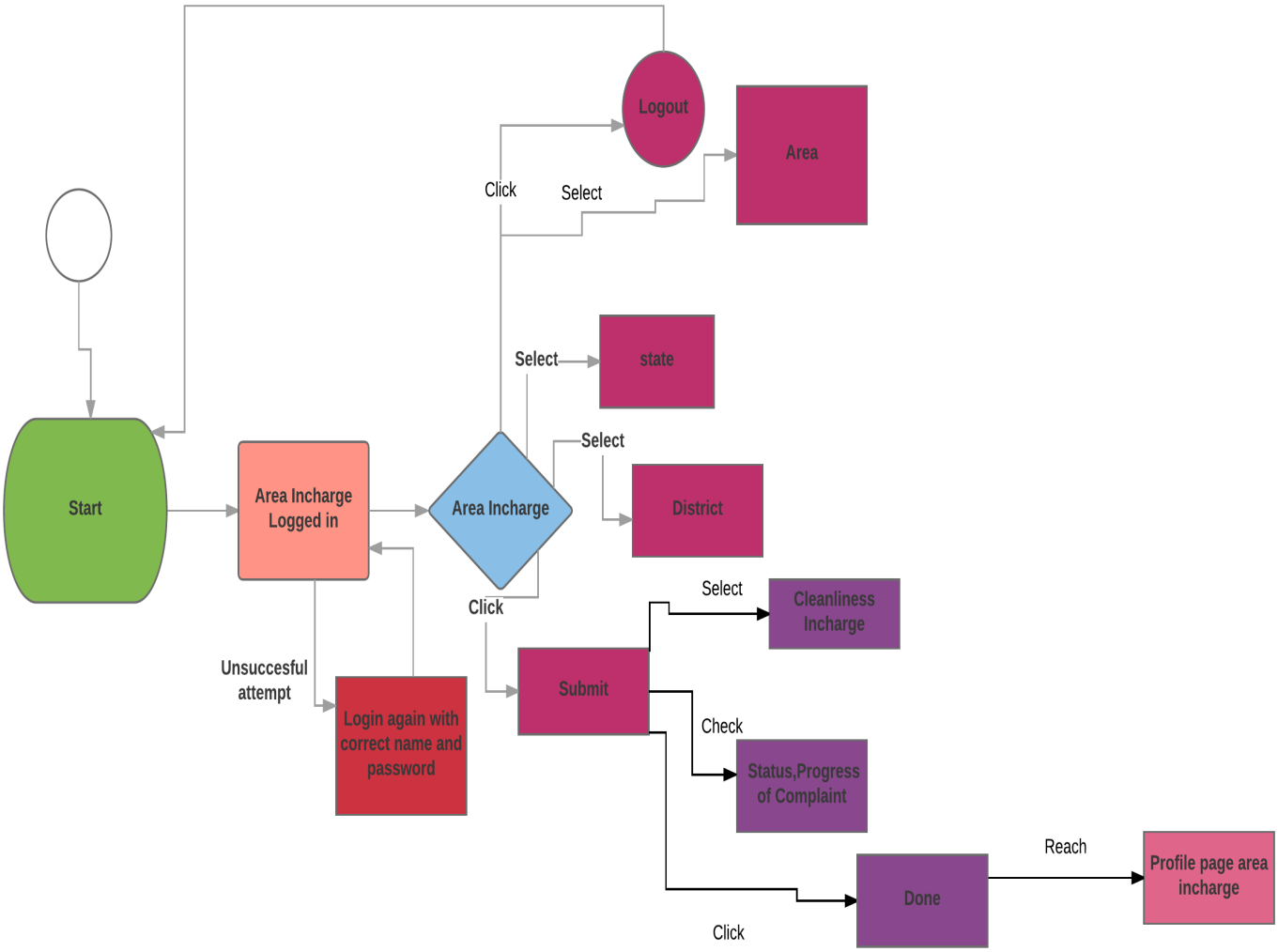


Rishi Raj Singh Balot(14UCS096)



Rahul Chawla(14UCS090)

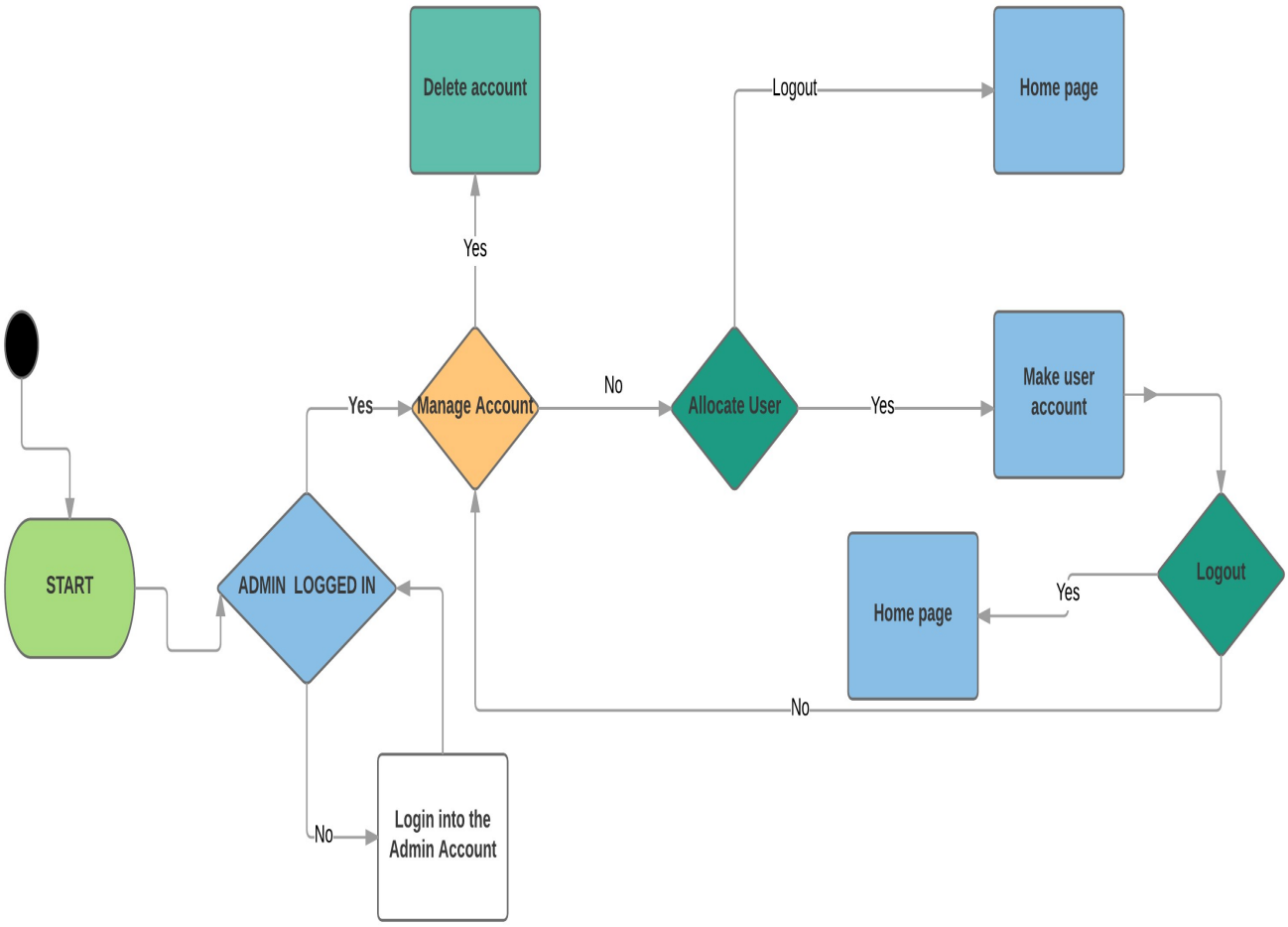
ACTIVITY_DIAGRAM_RAHUL_SPRINT2



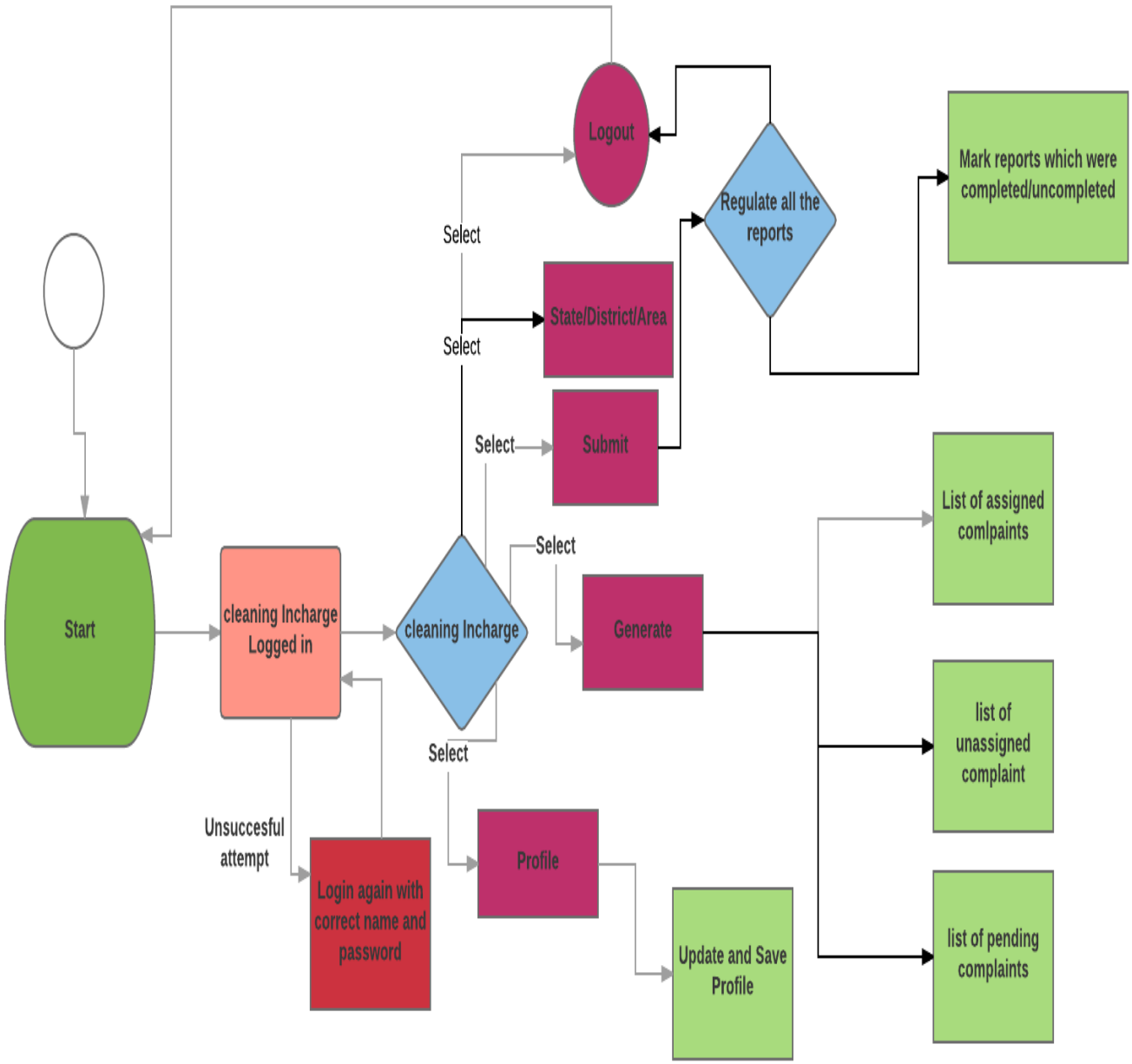
Shubham Sharma(14UCS120)

SHUBHAM

shubham sharma | October 25, 2016

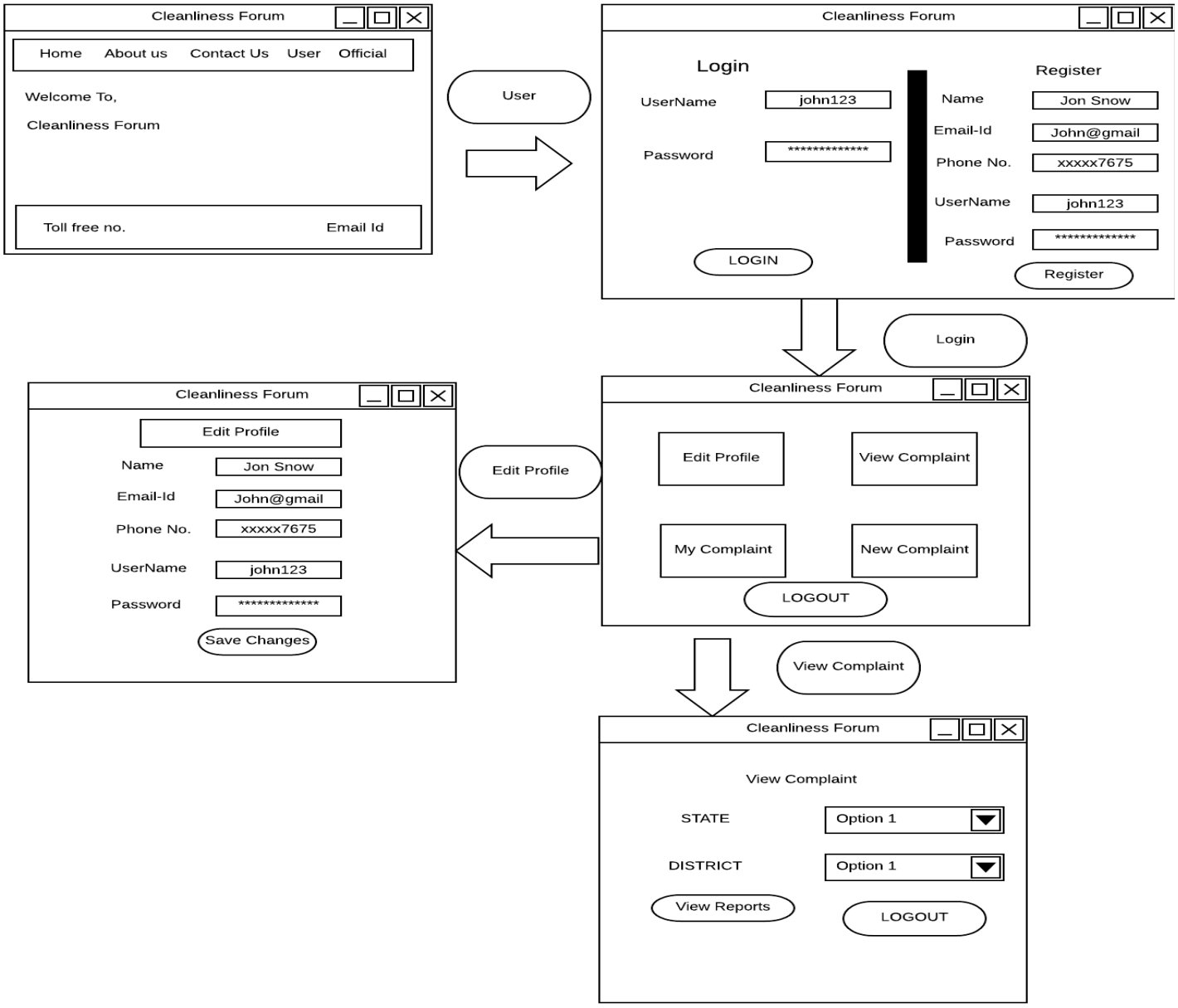


Sudhanshu Singh(14UCS128)

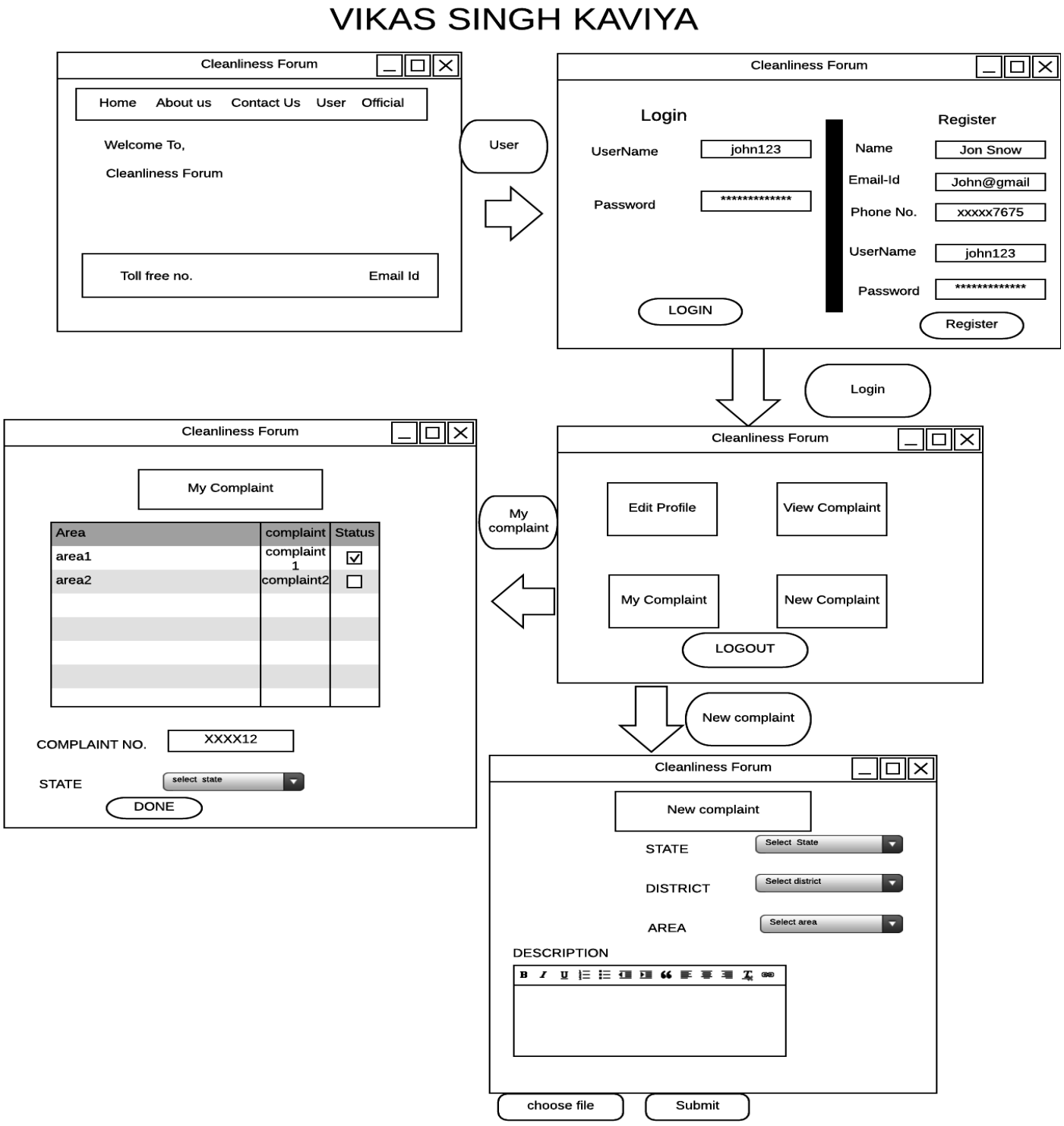


UI/UX Designs (Wireframes) – For the Sprint 3 functionality

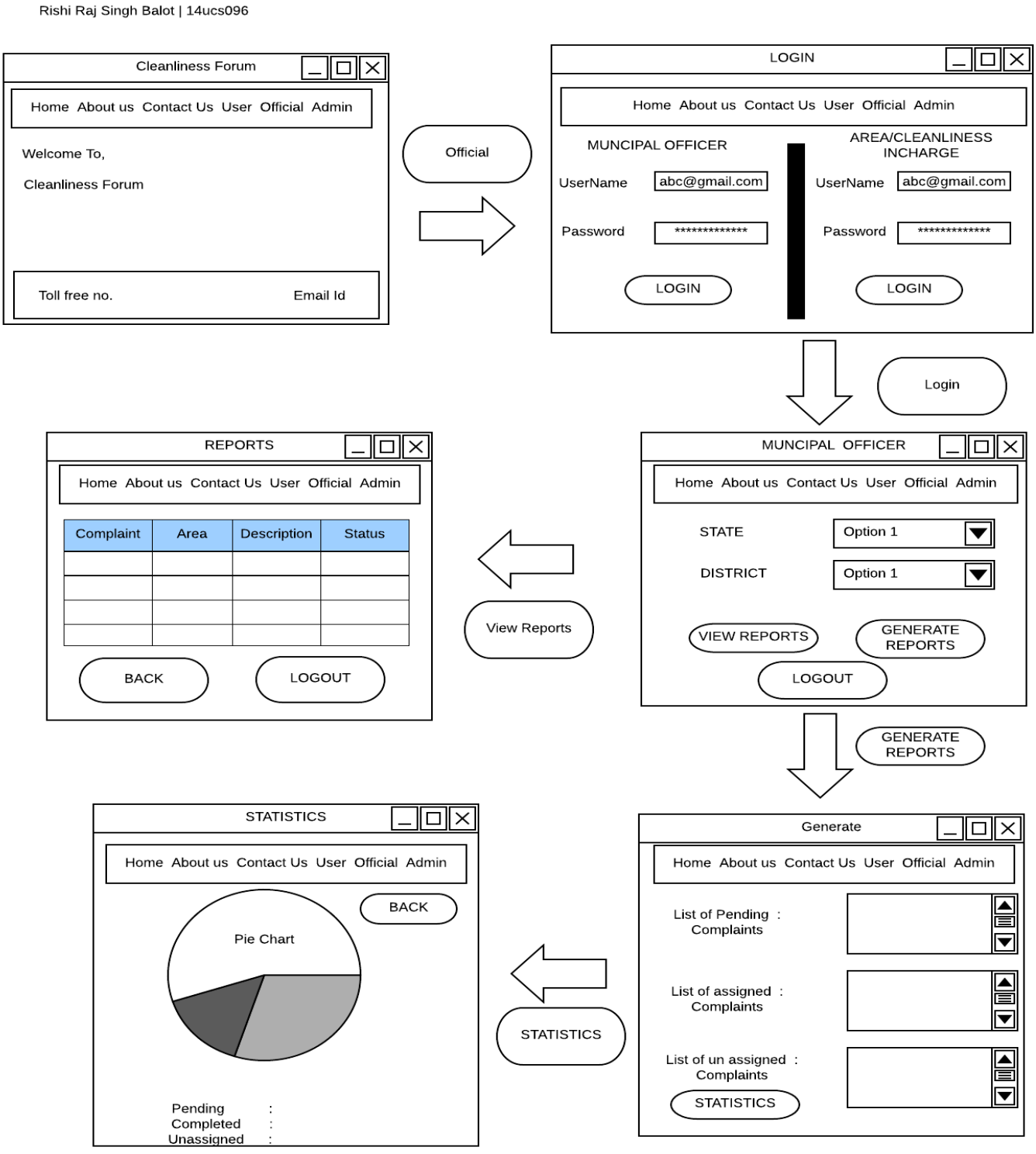
Vinayak Kothari(14UCS144)



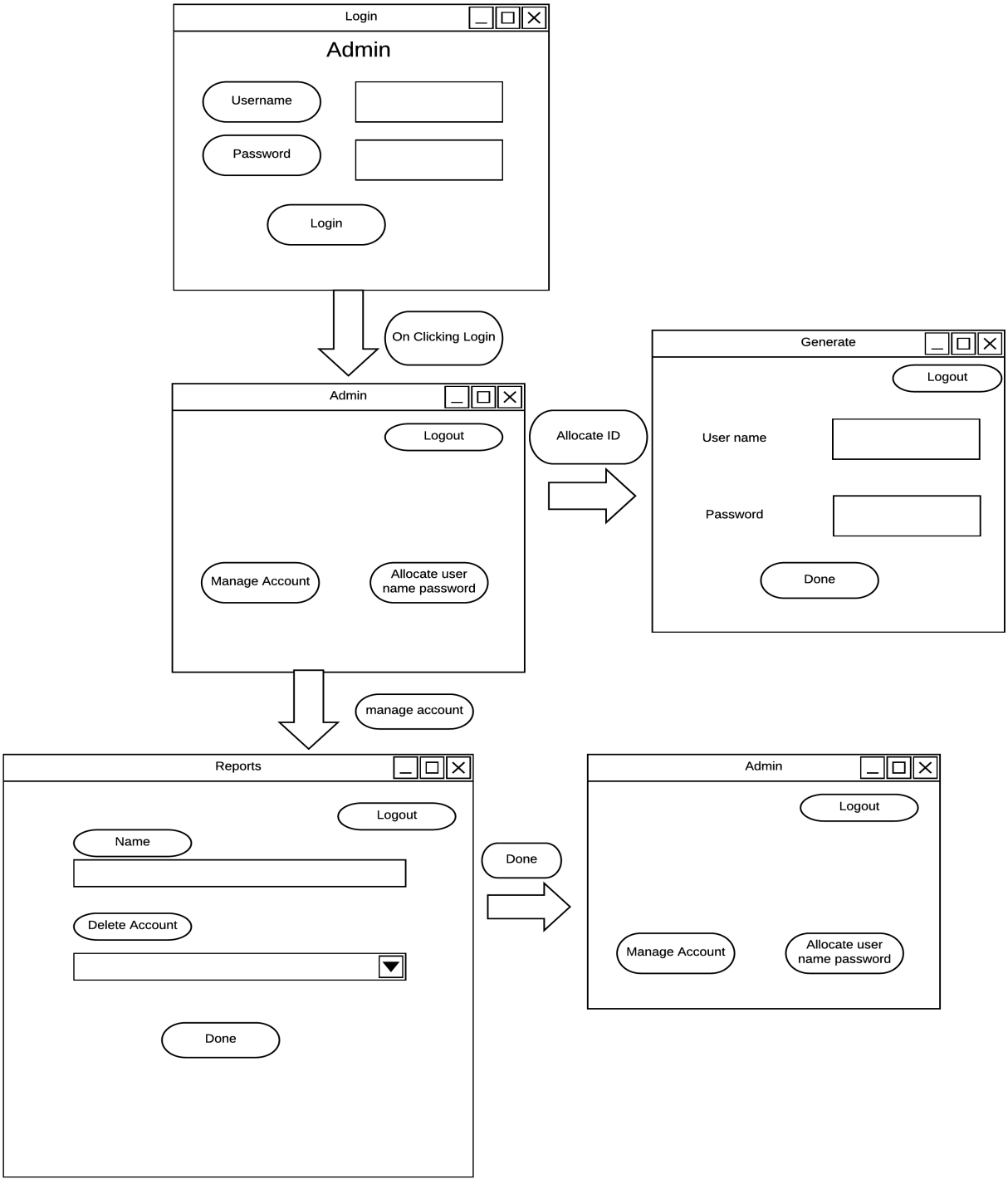
Vikas Singh Kaviya(14UCS143)



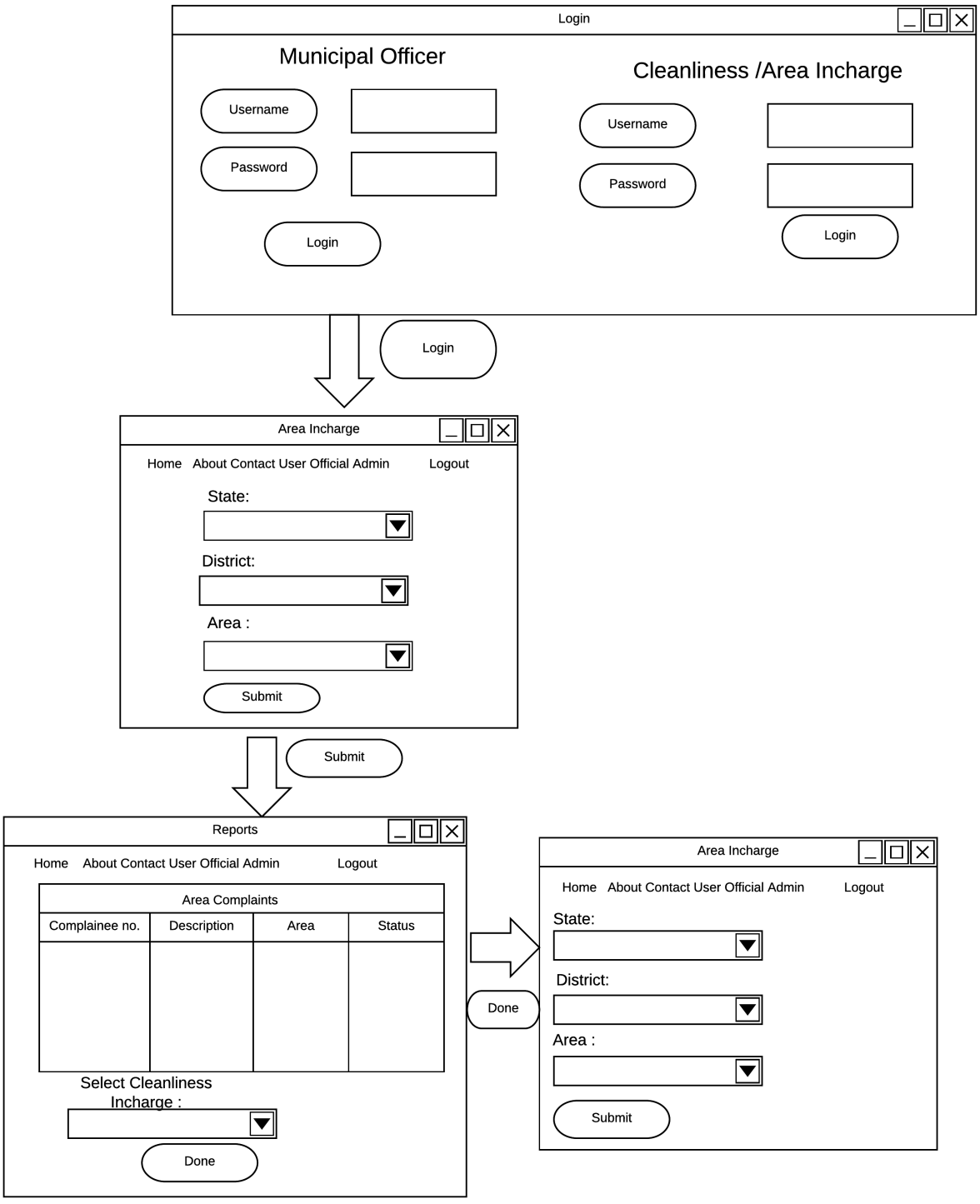
Rishi Raj Singh Balot(14UCS096)



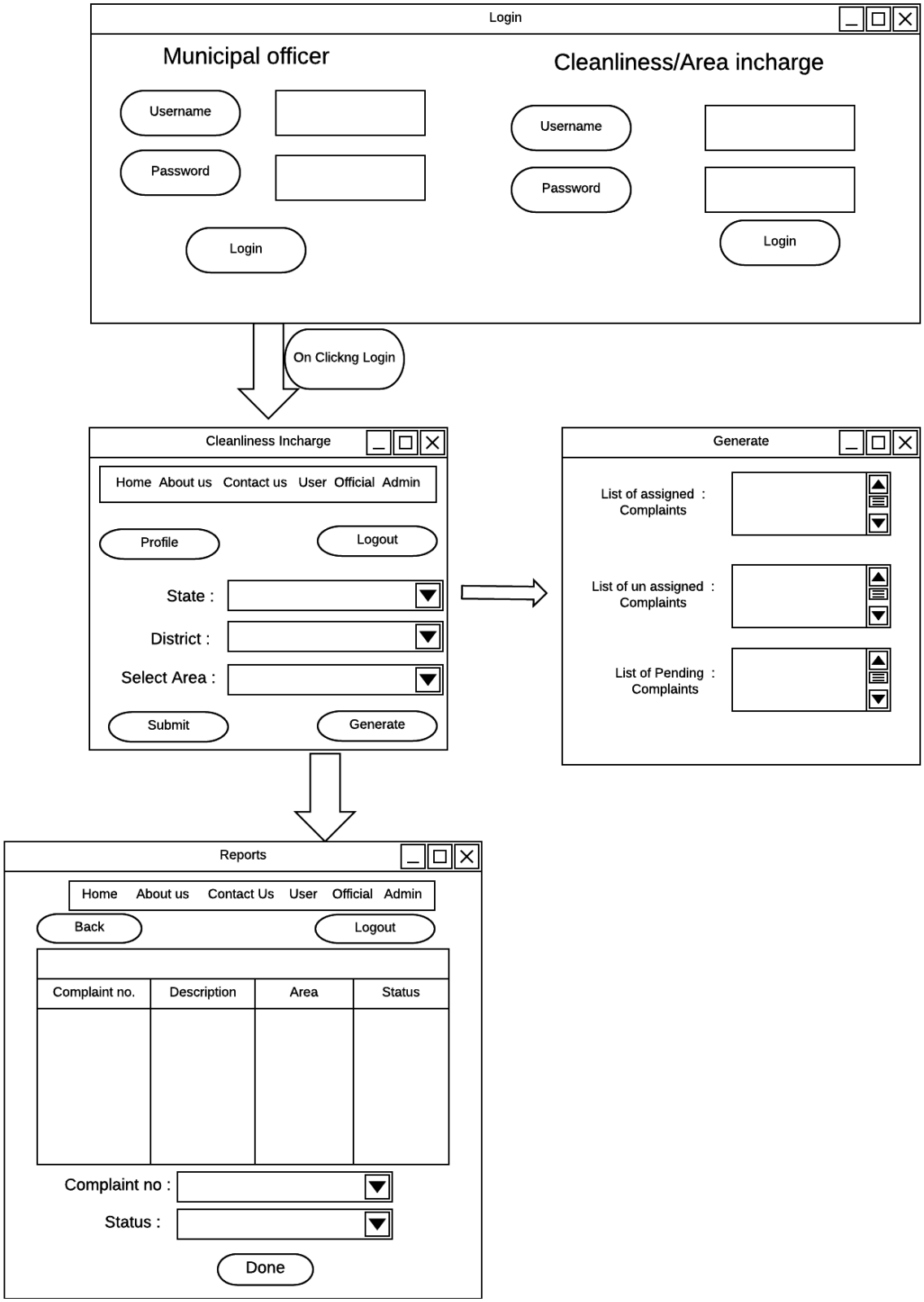
Shubham Sharma(14UCS120)



Rahul Chawla(14UCS090)



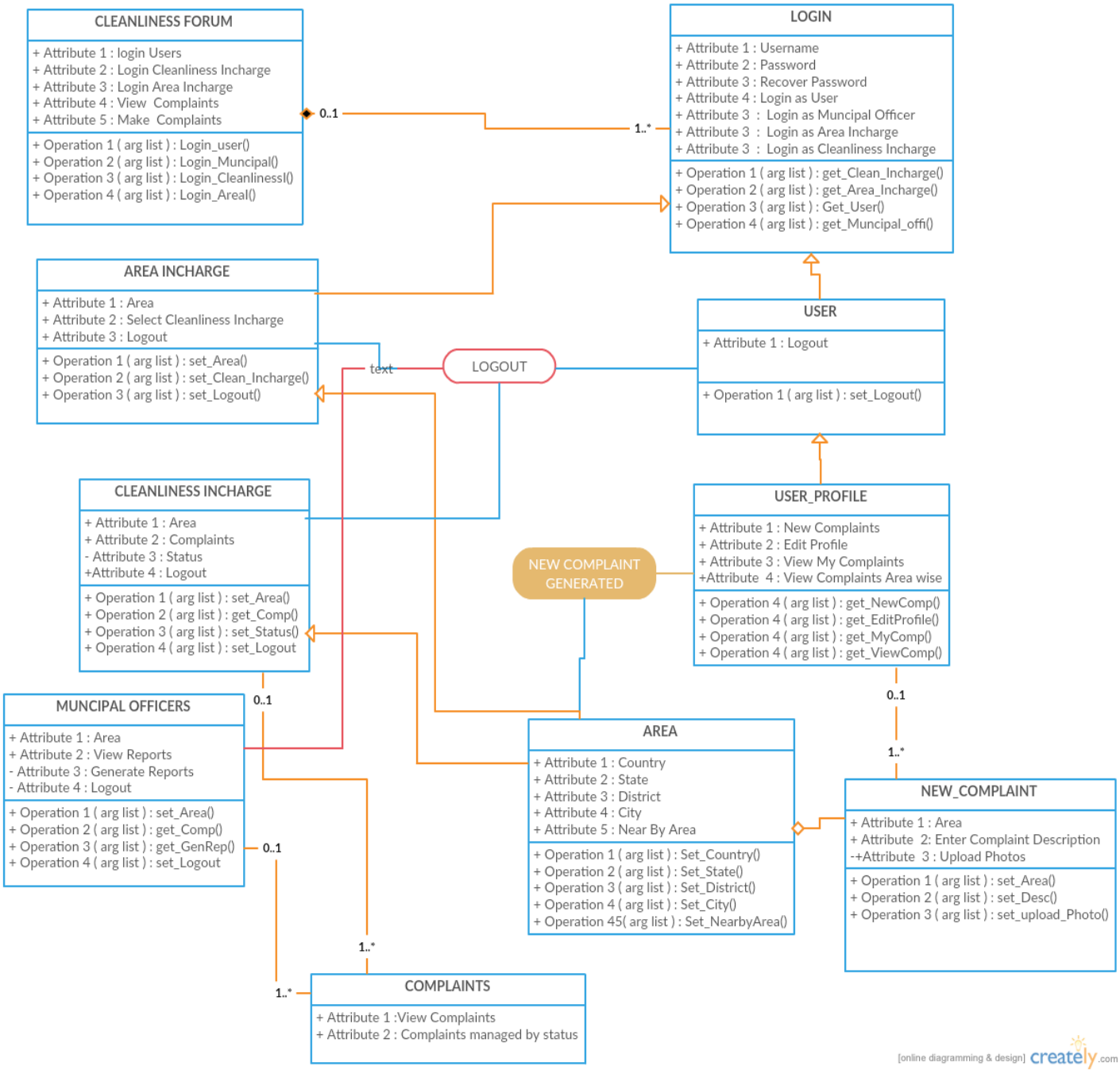
Sudhanshu Singh(14UCS128)



Class diagram – Revised and Extended

<attributes and operations can be listed on the diagram or on the following page as a table>

<add notes about 2 or 3 design patterns used in this class diagram>



Abstract Factory

- (Creational design pattern)
- Provide an interface for creating families of related or dependent objects without specifying their concrete classes. Abstract Factory, Builder, and Prototype define a factory object that's responsible for knowing and creating the class of product objects, and make it a parameter of the system.
- A hierarchy that encapsulates: many possible "platforms", and the construction of a suite of "products". Abstract Factory can be used as an alternative to Facade to hide platform-specific classes.
- The Abstract Factory defines a Factory Method per product. Abstract Factory classes are often implemented with Factory Methods, but they can also be implemented using Prototype.

Bridge(Structural design pattern)

- Bridge is a synonym for the "handle/body" idiom. This is a design mechanism that encapsulates an implementation class inside of an interface class. The former is the body, and the latter is the handle. The handle is viewed by the user as the actual class, but the work is done in the body.
- Decouple an abstraction from its implementation so that the two can vary independently. Use the Bridge pattern when you want run-time binding of the implementation, you want to share an implementation among multiple objects.
- Publish interface in an inheritance hierarchy, and bury implementation in its own inheritance hierarchy.

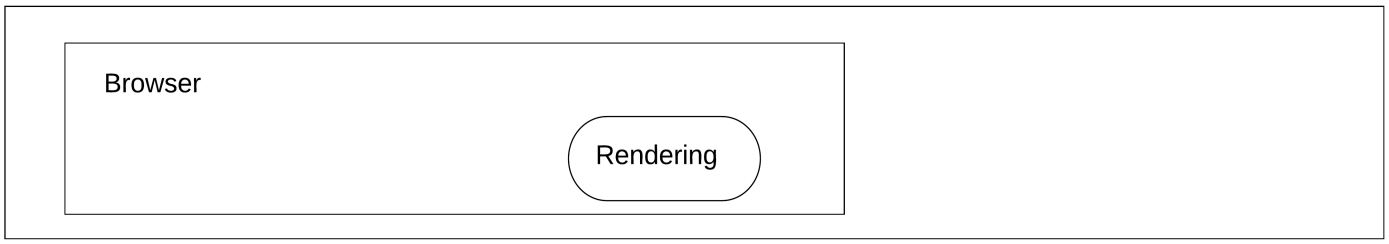
- Beyond encapsulation, to insulation. The Bridge design pattern proposes refactoring this exponentially explosive inheritance hierarchy into two orthogonal hierarchies – one for platform-independent abstractions, and the other for platform-dependent implementations.

Command(Behavioral design pattern)

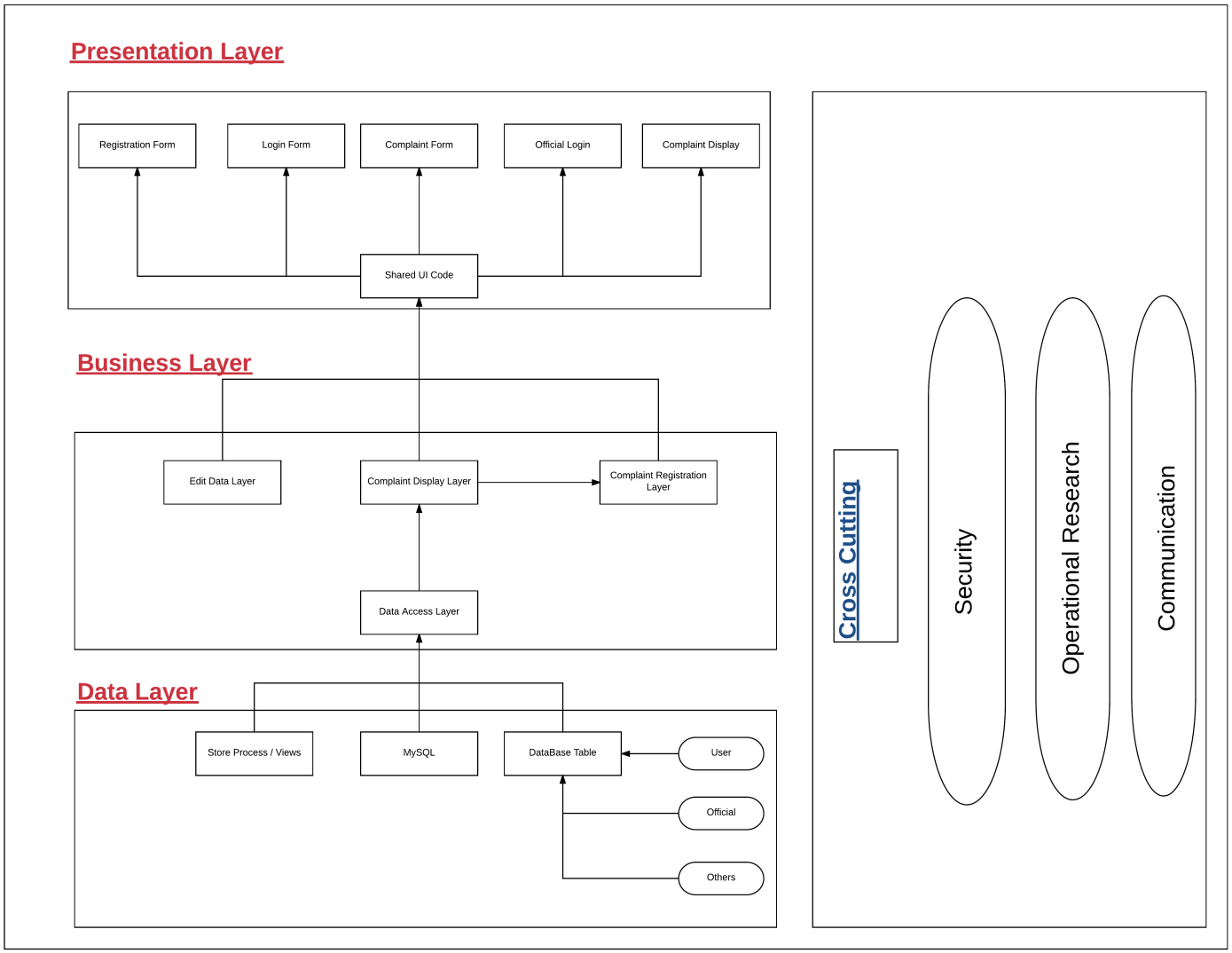
- Chain of Responsibility, Command, Mediator, and Observer, address how you can decouple senders and receivers, but with different trade-offs. Command normally specifies a sender-receiver connection with a subclass. Encapsulate a request as an object, thereby letting you parametrize clients with different requests, queue or log requests, and support undoable operations.
- Promote "invocation of a method on an object" to full object status. MacroCommands can be implemented with Composite. Chain of Responsibility can use Command to represent requests as objects. Command can use Memento to maintain the state required for an undo operation.
- An object-oriented callback. The client that creates a command is not the same client that executes it. This separation provides flexibility in the timing and sequencing of commands. Materializing commands as objects means they can be passed, staged, shared, loaded in a table

System Architecture Diagram

Client



Web Server



Scrum Minutes of the Meeting (Two entries per week for each team member)
Sprint 3 – Week 1

Team member	Work completed	Work planned	Impediments
VInayak Kothari (14ucs144)	Could not Handle complaints (Complainer)	Handling complaints data as and when complaint is registered.	Not familier with backend technologies.
Rahul Chawla (14ucs090)	Could not retrieve complaints. (Area Incharge)	Retrieving complaints data according to different area in area incharge session.	Not familier with backend technologies.
Rishi Raj Singh Balot (14ucs096)	Could not retrieve complaints. (Municipal officer)	Retrieving complaints data and their status.	Not familier with backend technologies.
Vikas Singh Kaviya (14ucs143)	Could not Handle complaints (Complainer)	Handling complaints data as and when complaint is registered.	Not familier with backend technologies.
Shubham Sharma (14ucs120)	Could not generate username and password (Complainer)	Generate username and password for all officials.	Not familier with backend technologies.
Sudhanshu Singh (14ucs128)	Could not retrieve complaints. (Complainer)	Retrieving complaints data complaint.	Not familier with backend technologies.

Sprint 3 – Week 2

Team member	Work completed	Work planned	Impediments
VInayak Kothari (14ucs144)	Work was not completed upto the mark	Connecting database of complaints through backend.	Problem in using backend
Rahul Chawla (14ucs090)	Work was not completed upto the mark	Connecting area incharge complaint display table with database.	Problem in using backend
Rishi Raj Singh Balot (14ucs096)	Work was not completed upto the mark	Connecting Municipal officer complaint display table with database.	Problem in using backend
Vikas Singh Kaviya (14ucs143)	Work was not completed upto the mark	Connecting database of complaints through backend.	Problem in using backend
Shubham Sharma (14ucs120)	Work was not completed upto the mark	Connecting database of uername and password.	Problem in using backend
Sudhanshu Singh (14ucs128)	Work was not completed upto the mark	Connecting area incharge complaint display table with database.	Problem in using backend

Sprint 2 – Week 3

Team member	Work completed	Work planned	Impediments
VInayak Kothari (14ucs144)	Completed satisfactorily	Improve UI/UX for complaint registration form	No difficult faced in improving user interface for complainer
Rahul Chawla (14ucs090)	Completed satisfactorily	Improved front end for area incharge complaints selection as per area and display table as per reviews	No difficult faced in improving user interface for area incharge.
Rishi Raj Singh Balot (14ucs096)	Completed satisfactorily	Improved front end for Municipal officer complaints selection as per area and display table as per reviews	No difficult faced in improving user interface for Municipal officer
Vikas Singh Kaviya (14ucs143)	Completed satisfactorily	Improved front end for complainee complaints selection as per area and display table as per reviews	No problem were faced in completing work
Shubham Sharma (14ucs120)	Completed satisfactorily	Improve UI/UX for admin.	No difficult faced in improving user interface for admin.
Sudhanshu Singh (14ucs128)	Completed satisfactorily	Improved front end for cleanliness incharge complaints selection as per area and display table as per reviews.	No difficult faced in improving user interface for cleanliness incharge

Sprint 3 Summary

Video Link : https://youtu.be/FPnUuvIDC4I

Website Link: http://hikecoupon.com/test/SWE/project.html

Review Summary (about the product)

1	We have improved our front end as per reviews given through peer review.
2	Worked on developing Model and controller part of MVC model and faced problem in using back end technologies.
3	Faced problem in creating sessions for user and officials.We worked on saving complaint data in database and retrieval.

Retrospective Summary (about the process)

1	Front end development has helped in creating good user experience for end user and peer review exercise has helped in getting the results of testing which as provided us options to

	improve it to greater extent.
2	Working on backend has helped us in knowing the intricacies of the back end development.
3	Adding system architectural layers diagram has helped in knowing the project's flow in much better way.

Overall Project Summary (max one page)

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(your expected to offer details on “process” and “product” in this section; any specific detailsr ono)

Cleanliness Forum is a web project in the direction to address the grievances of people who finds unhygienic conditions and accumulated garbage in their area. This project includes a login and registration by complainee. After login,complainee registers a complaint after selecting his/her area. Complainee can see the status of his/her complaints. Then comes the officials part. Admin generates password and username for Area incharge,Municipal Officer and Cleanliness incharge. On login,area incharge can see all the complaints regsitered in his/her area. He/She then assigns these complaints to Cleanliness Incharge and then these complaints are taken care of by Cleanliness Incharge. Municipal Officer can see all the complaints in any area and can see the progress of the complaints whether the complaints are being addressed effectively. These registered complaints are then for Working on this project has helped us in learning about how to divide and manage development of different functionalities needed for smooth functioning of the project.The division of work in sprints help us in planning according to deadlines and complete work prior to deadlines.This project has helped us in learning development of a good User Interface using front end technologies like HTML,CSS,Javascript. The documentation work helps us in keeping a written plan of how to execute the coding and designing in sprint. We have learnt to deploy project on web server and identifying and dividing different classes much more effectively.The activity diagram helps in determining flow of different functionalities. The wireframes helped in keeping a prototype of the UI to be developed. The use case diagram helps in determining different users and showing a demonstration of the functionalities associated with these people.