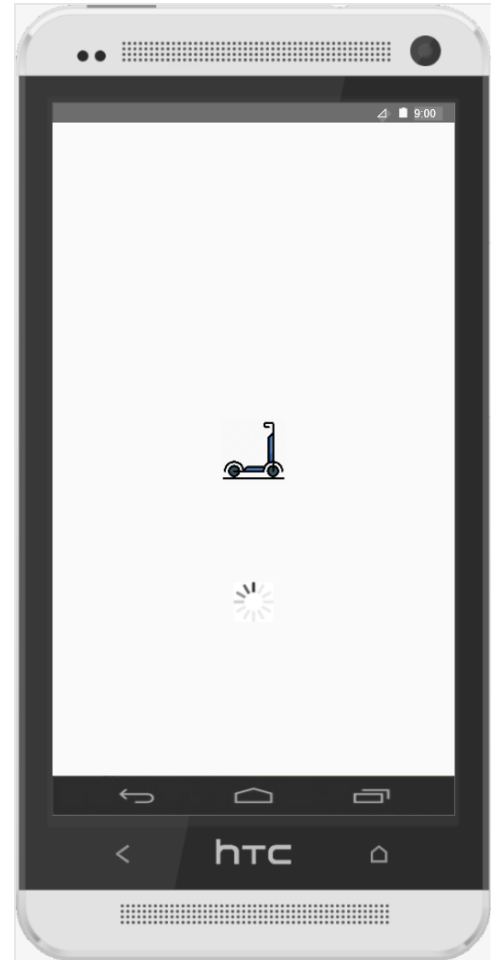
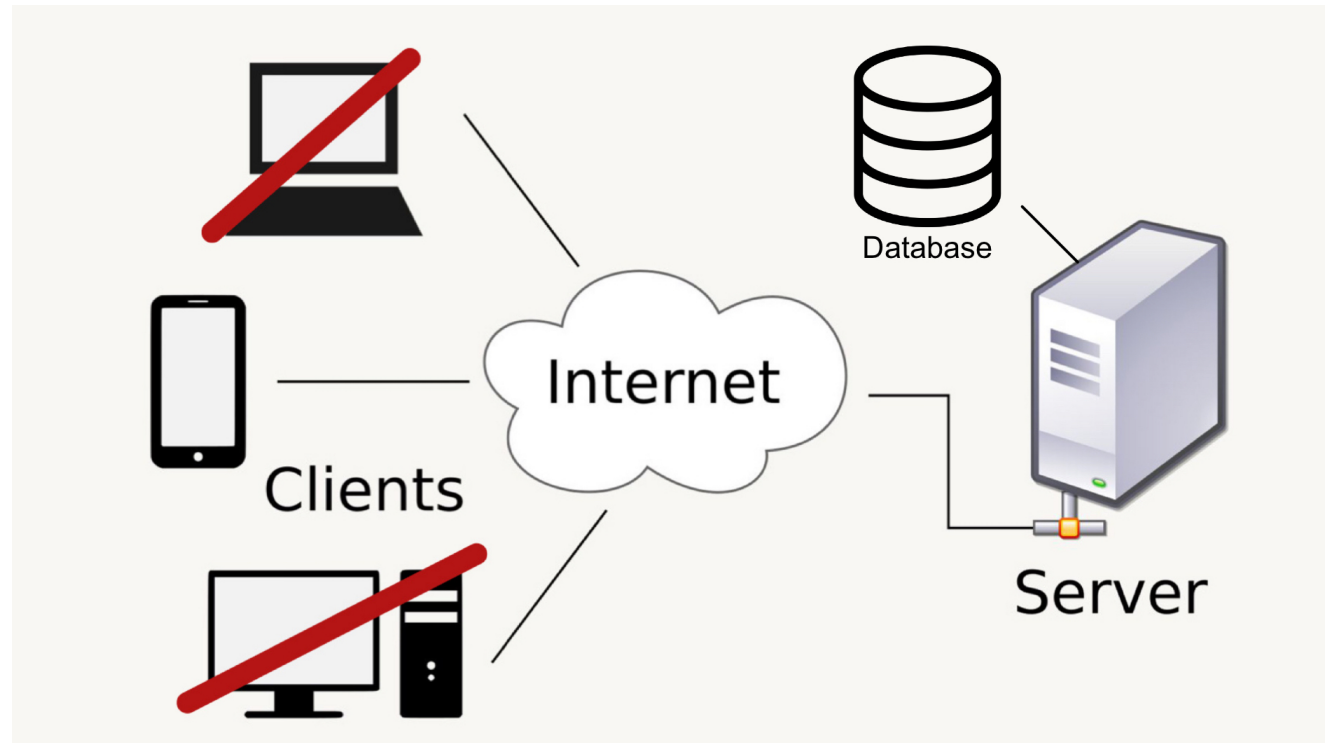


# Software Engineering – Analysis Project: E-Scooter Rental Service

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# High-level Software Architecture



Source: <https://commons.wikimedia.org/wiki/File:Client-server-model.svg>  
(modified by Kendra Birringer)

# Tools

- Google Sheets
- Discord
- GitHub
- MagicDraw
- Axure
- LaTeX



Google Sheets

Source: <https://de.cleanpng.com/png-8ht5bw/>



**DISCORD**

Source: <https://discordapp.com/branding>



Source:

[https://www.lieberlieber.com/embedded-engineer/home-2/magicdraw\\_logo/](https://www.lieberlieber.com/embedded-engineer/home-2/magicdraw_logo/)



Source: <https://github.com/logos>

**axure**

Source:

<https://www.brandeps.com/logo/A/Axure-01>

**L<sup>A</sup>T<sub>E</sub>X**

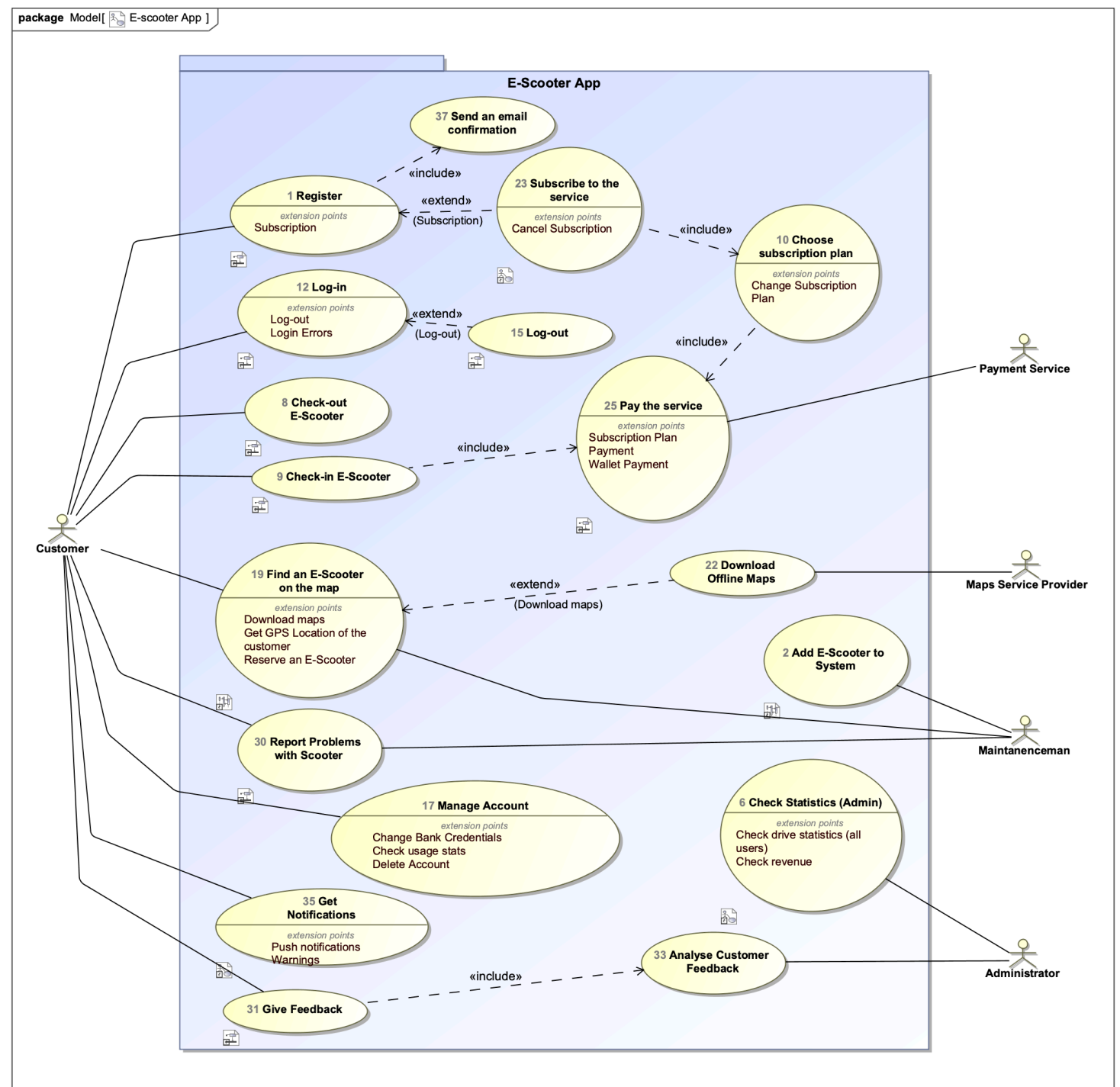
Source:

[https://de.wikipedia.org/wiki/LaTeX#/media/Datei:LaTeX\\_logo.svg](https://de.wikipedia.org/wiki/LaTeX#/media/Datei:LaTeX_logo.svg)

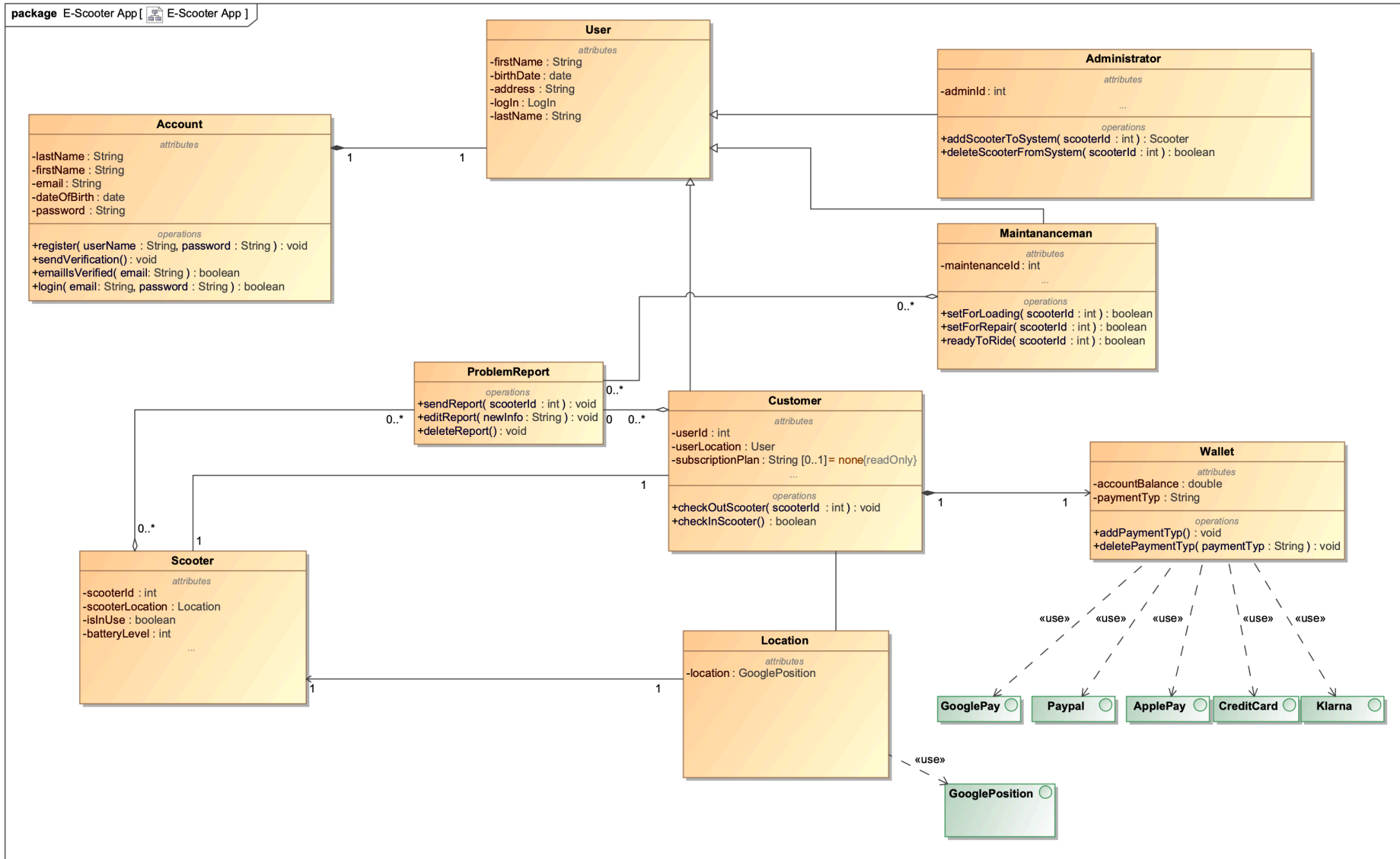
# Requirements

ID	Name	Requirement Type	Associated Roles	Event/ use case #	Description	Rationale	Source	Fit Criterion	Customer Satisfaction	Customer Dissatisfaction	Dependencies	Conflicts	Supporting Materials	Priority	Estimation	Status	User Story
1	Registration	Functional	Customer	Register	Customers need to register to get personal information, payment method etc.	Customers must register to use the E-Scooter rental service	Steffen Hanzlik, Marco Peluso, Kendra Birringer	Fits if the customer can register successfully	5	5	Registration success	None		High	8	Done	As a new customer, if I want to use the service, I must be able to register and create a new account.
2	Log-in	Functional	Customer	Manage Account	Customers must log-in if they want to rent an E-Scooter	Customers must log-in to use the E-Scooter rental service	Steffen Hanzlik, Marco Peluso, Kendra Birringer	Fits if the customer can log-in	4	4	Register	None		High	5	Done	As a customer, if I want to use an E-Scooter, I must be able to log-in into my account.
3	Log-out	Functional	Customer	Manage Account	Customers must have the possibility to log-out	Customers should be able to log-out from our service	Steffen Hanzlik, Marco Peluso, Kendra Birringer	Fits if the customer can log out	3	3	Register, Log-in	None		High	2	Done	As a customer, if I finished the ride and do not need the E-Scooter anymore, I must be able to log-out of my account.
4	Change Account Details	Functional	Customer	Manage Account	Change personal information or payment	Customers should be able to change their personal information	Steffen Hanzlik, Marco Peluso, Kendra Birringer	Fits if the customer can change account details successfully	3	5	Register, Log-in	None		Medium	3	Done	As a customer I would like to be able to change my account information if something has changed, like personal information or payment method.
5	Delete Account	Functional	Customer, Admin	Manage Account	Customers and Admins can delete a customer's account	Customers should be able to delete their account if they do not want to use the E-Scooter Service any further. Also, if the customer is not following the Terms and Conditions, the Admins also should be able to remove the customer's account	Svetozar Stojanovic	Fits if the customer's account no longer exists	3	3	Register, Log-in	None		Medium	2	Done	As a customer, I want to be able to delete my account if I do not want to use the service anymore. / As an Admin I want to be able to delete a customer's account, if she/ he violates the Terms and Conditions.

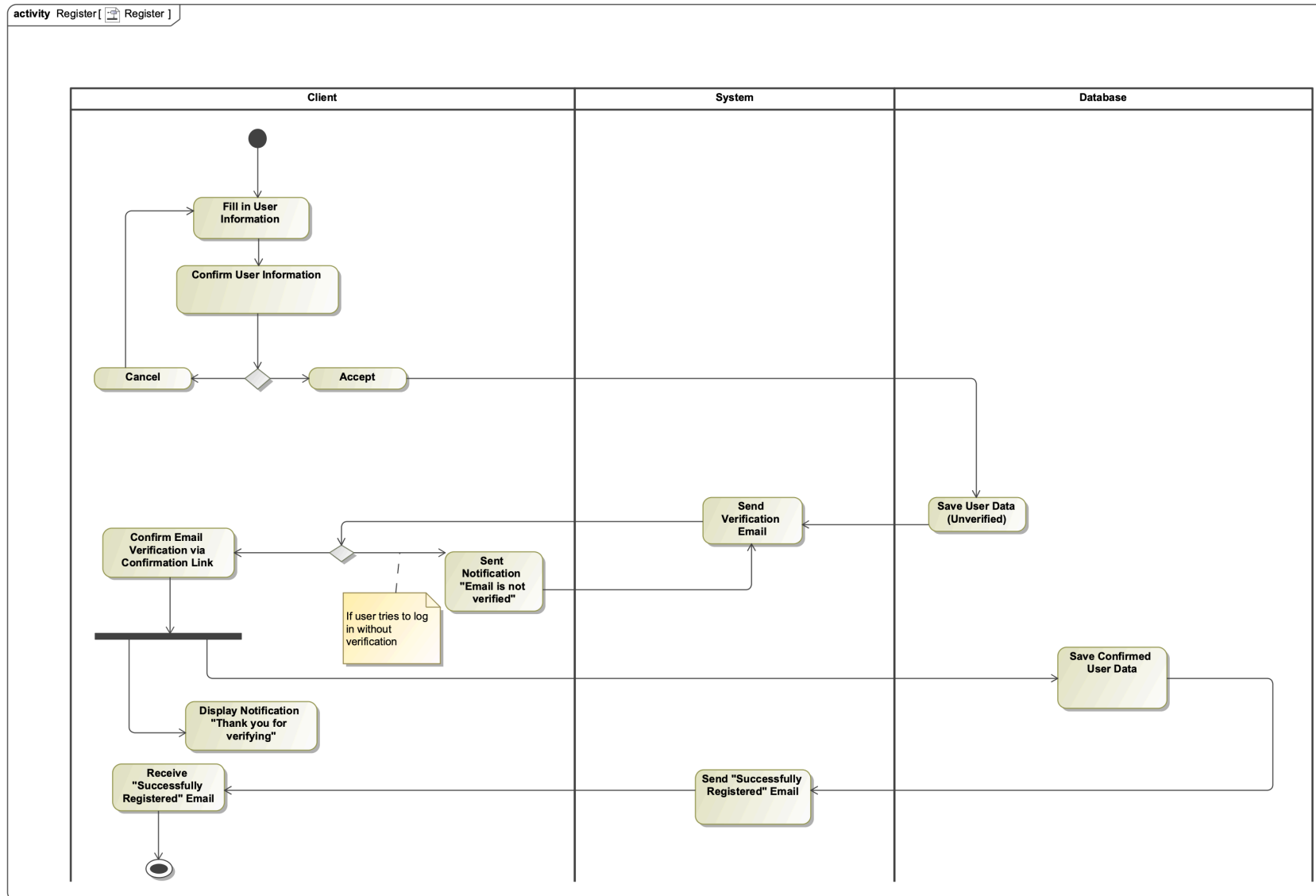
# Use Case Diagram



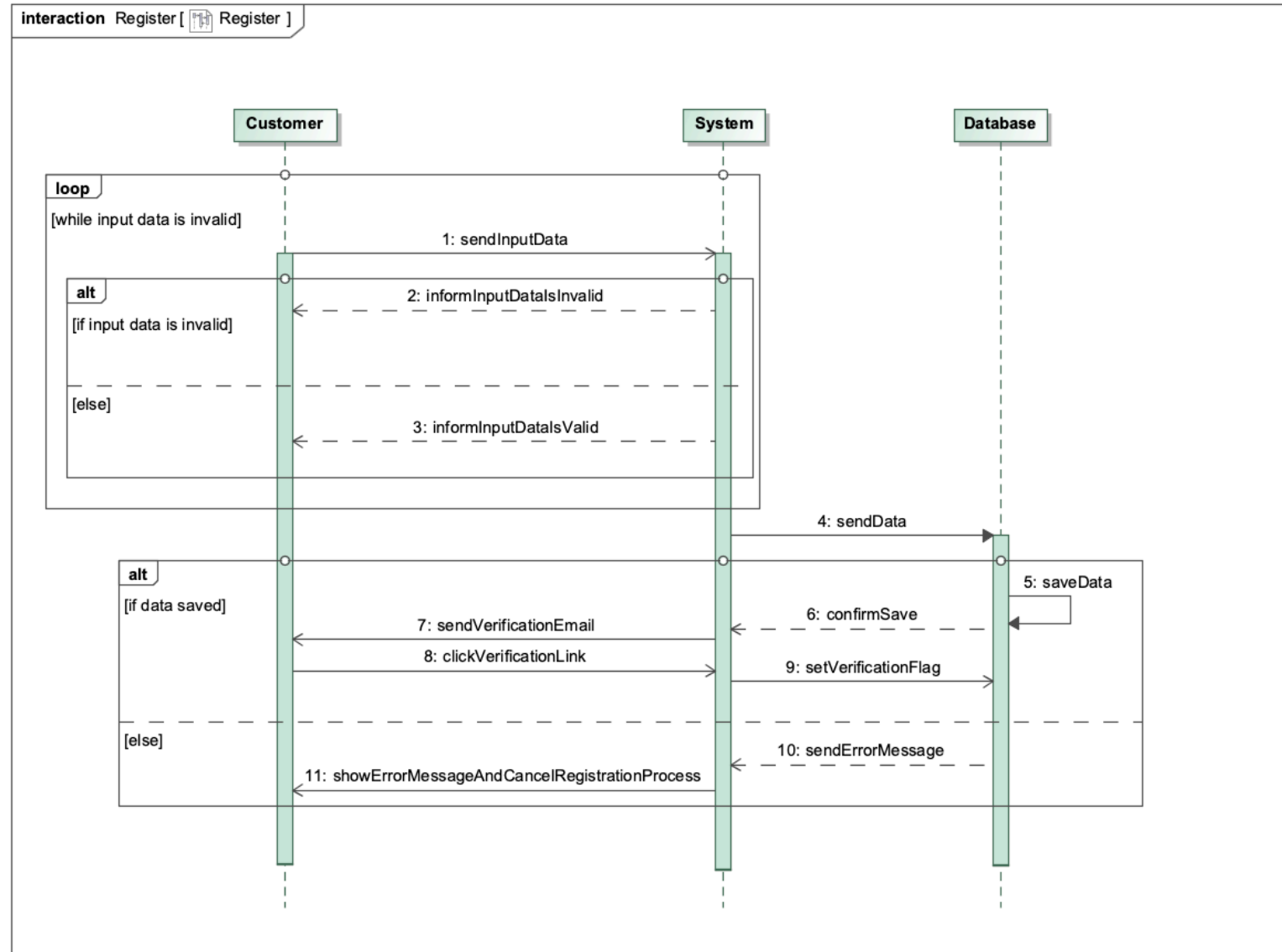
# Class Diagram



# Activity Diagram



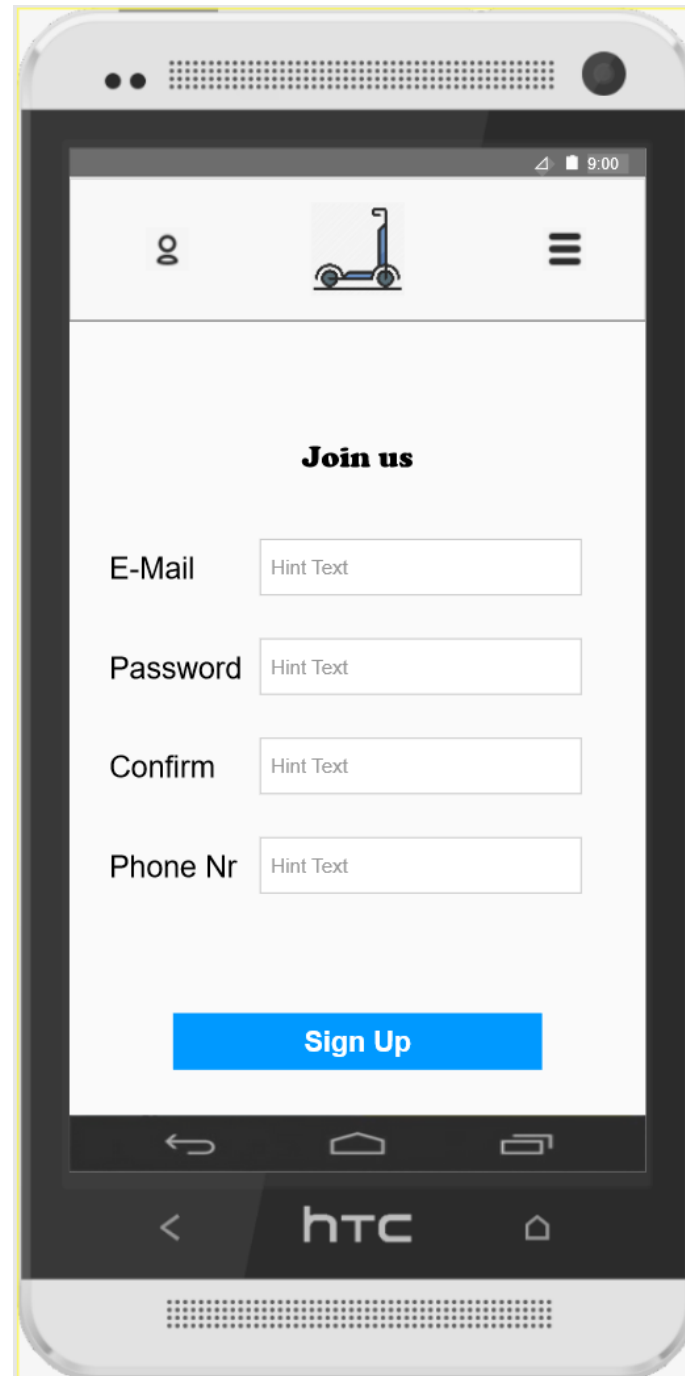
# Sequence Diagram





# UI Prototype

- Axure Experience
  - Can be animated and used as a web app
- Focus on the mobile platform



# Conclusion

- Scrum Experience
- Difficulties
  - Different time schedules for team members

