## **Requirement - User Story:**

	User Story	Conditions of Satisfaction
US01	As a data analyst, I want to be able to log in before using the system, so that I am the only one who can update data and modify the algorithm.	Allows login details to be set up with an email.
		ID made cannot be already used by someone.
		Password needs to be made
		Only after verification of the details, one would be able to successfully create an account.
US02	As the manager, I want to be able to log in before using the system, so that I am the only one who can look at the user activities.	Allows login details to be set up with an email.
		ID made cannot be already used by someone.
		Password needs to be made
		Only after verification of the details, one would be able to successfully create an account.
US03	As the manager, I want to look at the visualizations created with the data so that I can gain insights and find improvements to the business.	System will show different visualizations the user can interact with within 2 seconds when pressing a button to see the visualization.
		Results can be tailored by month, time of the day, holiday and non-holiday, and weekday and weekends.
		Results are shown for the previous 4 years.
		System will not allow any modification of the visualization.
		Data is retrieved from the Seoul Bike Data repo using an authenticated API.
US04	As the manager, I want to know the number of rental bikes that will be rented each day so that I can increase the supply if necessary.	Details of the day and the time are automatically retrieved from the internet when the app is opened.

		The details of the day can be modified before prediction. (So while all detail of that day would be filled in automatically, one can change it to predict for some other time or day)  All entries have to be entered for the system to predict the demand.  System should be able to give out the result in 3 second
US05	As the general public, I want to be able to see the visualizations to understand the demand of the service more as I find it interesting.	System will show different visualizations the user can interact with within 2 seconds when pressing a button to see the visualization.  Results can be tailored by month, time of the day, holiday and non-holiday, and weekday and weekends.  Results are shown for the previous 4 years.  The system will not allow any modification of the visualization.  Data is retrieved from the Seoul Bike Data repo using an authenticated API.
US06	As the general public, I want to be able to know how high the demand for the bike is at a specific time so I can plan my day and decide whether I should ride the bike.	Details of the day and the time are automatically retrieved from the internet when the app is opened.  The details of the day can be modified before prediction.  All entries have to be entered in order for the system to predict the demand.  System should be able to give out the result in 3 seconds.
US07	As the general public, I want to be able to access the system on Android or OS mobile phones so that I can use any phone I have.	Must support the 3 most recent versions of Android and IOS.

US08	As a manager, I want to see how many the general public is interacting with the app.	System tracks the number of users that used the app each day and the time of the day they used it.  System tracks the prediction accuracy to see if it is working well.  Must comply with data protection law.
US09	As the data analyst, I want to be to update the data so that the data isn't outdated and better predictions can be made.	Allow one to enter new data after logging in.  The data put in only accept excel files.  Data is saved and updated and if something goes wrong the previous data will be retrieved.
US10	As a data analyst, I want to be able to improve the prediction model so that we are given more accurate predictions.	Only after login in, one can have access to the algorithm code.  System will automatically ignore the error and if the present code causes an error to stop the program, the system will automatically send an email to the modifier.
US11	As the manager, I want to be able to able to know the general public like the app but also the bike renting system, so I want to listen to their opinions through the app.	While it's anonymous, comments can only be written after verification with a phone number.  Reviewers will write their phone number and verification will be sent in 3 minutes.  In the next section, comments can be written yet can't be longer than 200 words.

## **Requirement Prioritization:**

	User Story	Priority	Reason
US01	As a data analyst, I want to be able to log in before using the system, so that I am the only one who can update data and modify the algorithm.	Must Have	If everyone has access to the data and the algorithm it would cause a lot of problems.
US02	As the manager, I want to be able to log in before using the system, so that I am the only one who can look at the user activities.	Should Have	If everyone has access to the activity data it would be a problem, so if the app is going to track activity for the app this would necessary.
US03	As the manager, I want to look at the visualizations created with the data so that I can gain insights and find improvements to the business.	Must Have	Understanding and providing insights about bike renting is one of its goals.
US04	As the manager, I want to know the number of rental bikes that will be rented each day so that I can increase the supply if necessary.	Must Have	The main purpose of the app is to be used exactly like this user story.
US05	As the general public, I want to be able to see the visualizations to understand the demand of the service more as I find it interesting.	Should Have	Understanding and providing insights about bike renting is one of its goals.
US06	As the general public, I want to be able to know how high the demand for the bike is at a specific time so I can plan my day ahead and decide whether I should ride the bike.	Should Have	It would be nice to share the information with the public and it is a functional that the business managers would also use.
US07	As a rental bike user, I want to be able to access the system on Android or OS mobile phones so that I can use any phone I have.	Should Have	Our main user is bike business manager, however since we want general public to use it, it would be important to have this requirement.
US08	As a bike business manager, I want to see how many people are using the app so I can know	Could Have	This is additional requirement that has nothing to do with reaching our goal of forecasting bike demand, yet

	if the general public find it useful, the algorithm is working well, and what other activities were performed.		it isn't too complex and can create value for the user.
US09	As the bike data updater, I want to be to update the data so that the data isn't outdated and better prediction can be made.	Must Have	Keeping the data up to date is important for forecasting demand.
US10	As the bike data updater, I want to be able to improve the prediction model so that we are given more accurate predictions.	Must Have	It is essential that the forecast od demand is accurate.
US11	As the bike data updater, I want to be able to able to know the general public like the app but also the bike renting system, so I want to listen to their opinions through the app.	Won't Have	This has nothing to do with forecasting or using the data to understand the demand, hence it is unnecessary. Moreover, it could overcomplicate the app and make it unable to finish it on time.