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AMSI

LABORATORY WORK #2

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**Project description.**  
**Modeling your project with Use Case Diagrams.**

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## **Laboratory Work #2**

### **Topic:**

Project description. Modeling your project with Use Case Diagrams.

### **Tasks:**

- Model the application using 3 Use Case Diagrams;
- Create the basic and alternate flows of 3 most important use cases;

## 1 Model of the application and Use Case Diagrams.

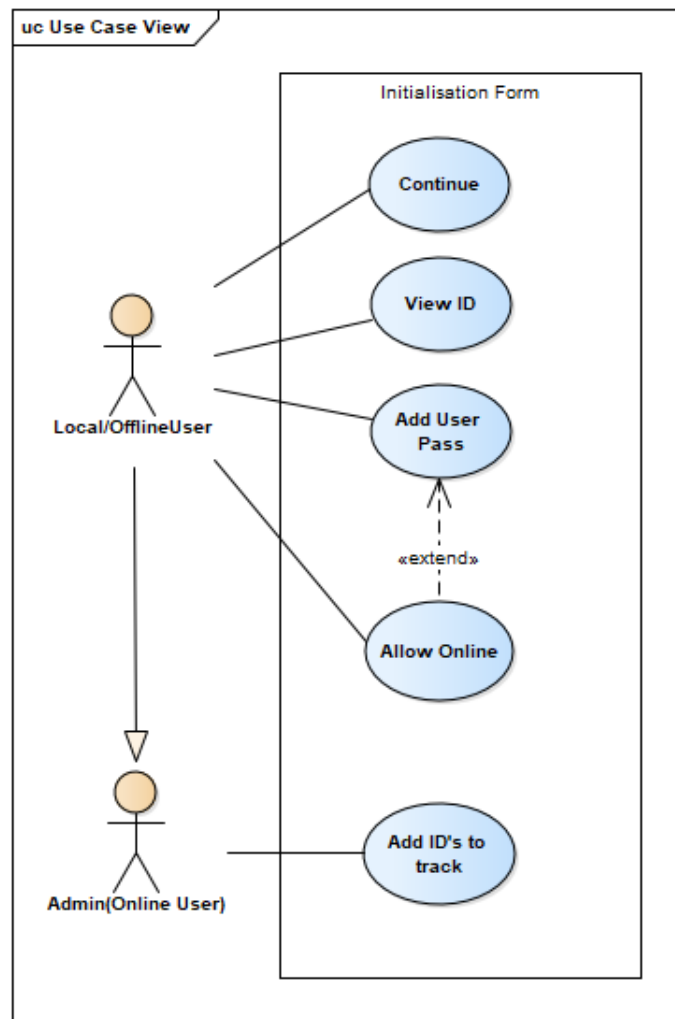


Figure 1.1 – Initialization Form.

- My application has 2 types of actors **Local** which works in offline mode as well and **Admin** which is a generalized form of a Local User.
- A Local User can become an Admin after choosing the **Allow Online** option.
- **Allow Online** can be only accessed after inputting a **User Pass**.
- An Admin has the option to add Local Users who he could track data.
- In order to add a Local User the admin has to input their ID and their User Pass.
- Upon initializing the application each Local User is given an ID.
- All types of Users/actors must press continue to go to selection form.

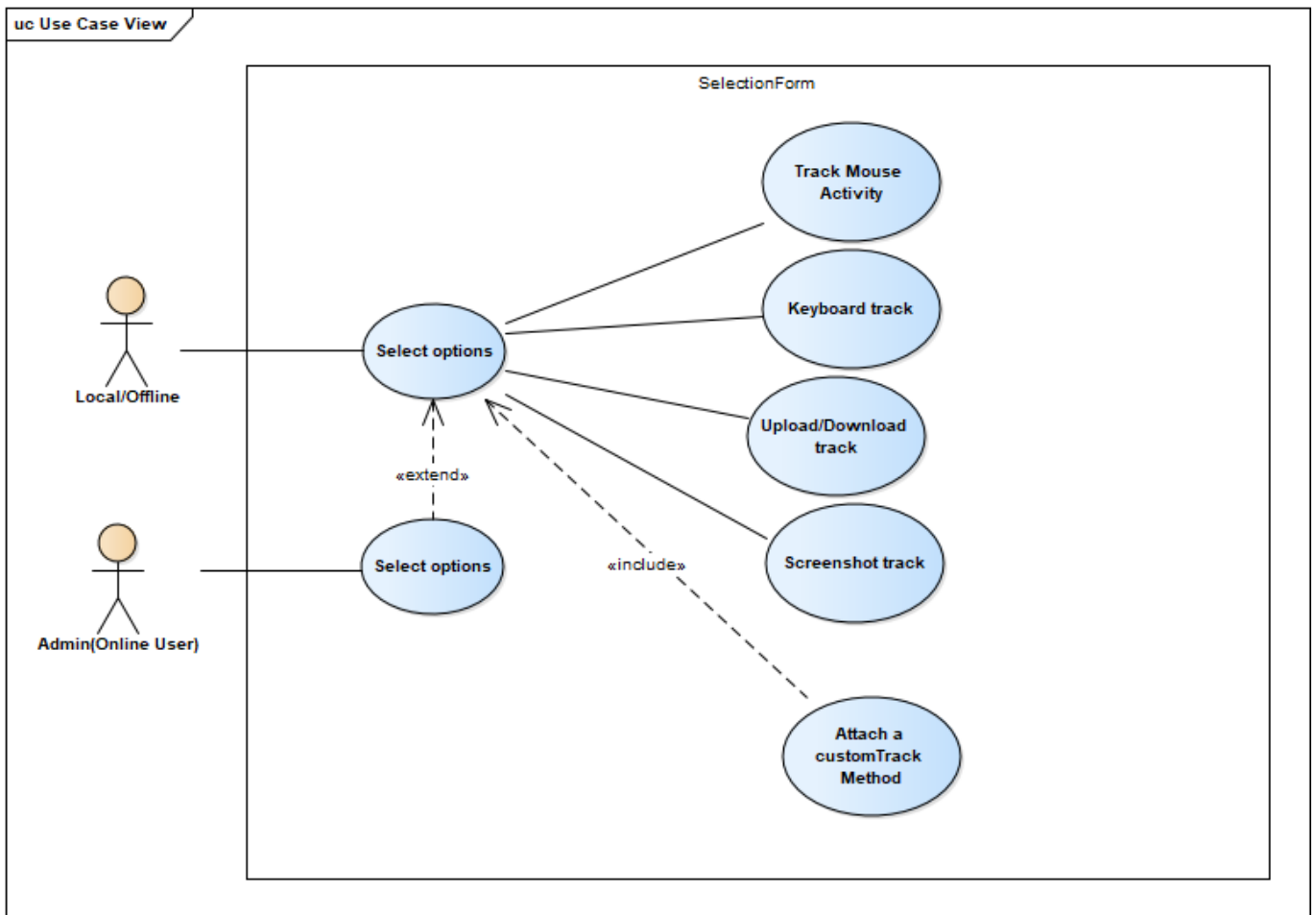


Figure 1.2– Selection Form.

- After completing the initialization form, the Local/Offline User can Select Options from Default Tracking Methods (*Keyboard Track, Track Mouse Activity, Upload/Download Track, Screenshot Track*).
- Additionally a Local user can add their own Tracking Method, by selecting **Attach a custom Track Method**.
- If a Local user is a part of a network where there is an Admin then the Select Options that he has made will be overwritten by the Select Options that the Admin has on his machine.

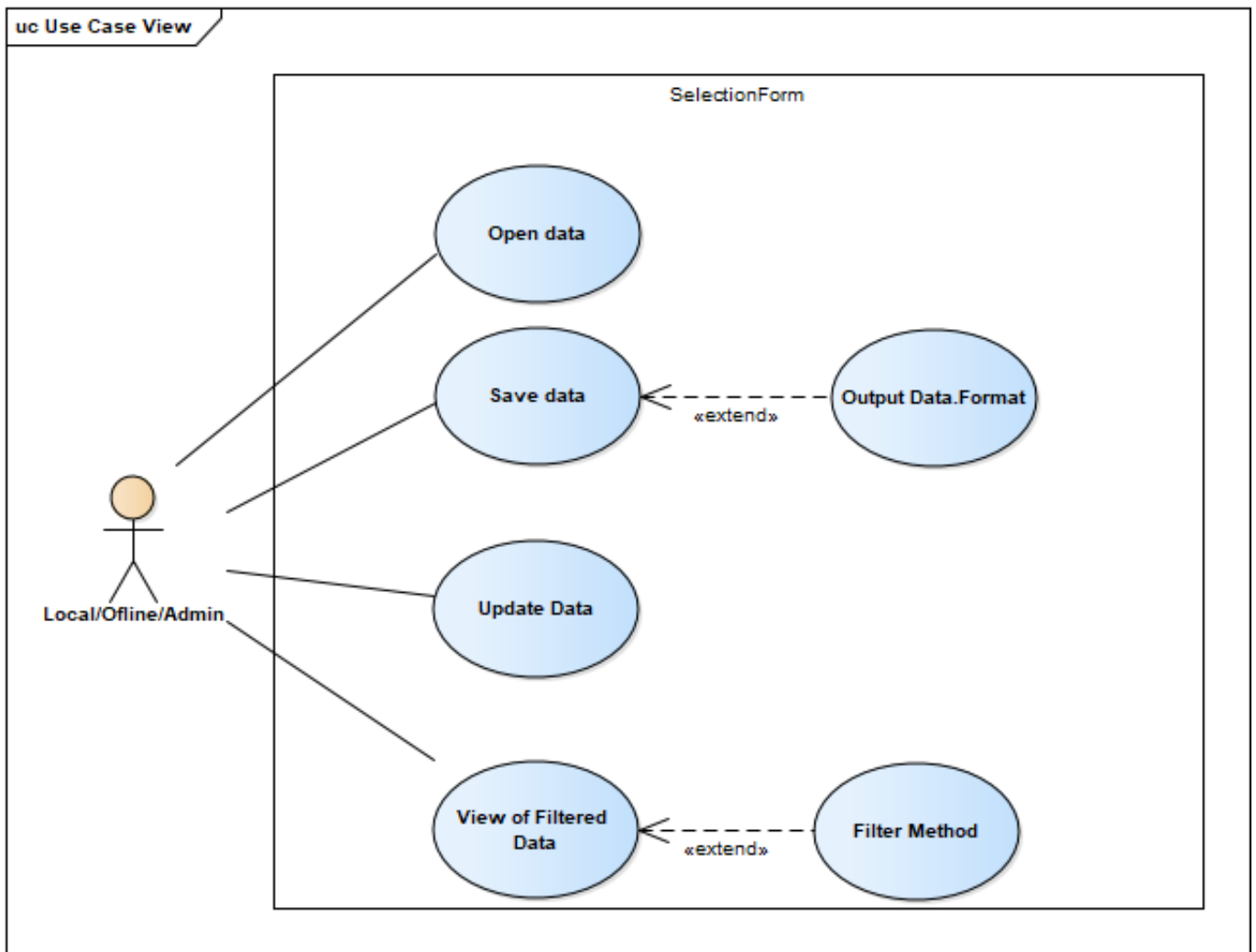


Figure 1.3– Output Form.

After completing the **Selection Form**, the Actor which in this case represents all types of users has 3 options to chose to get the data that was tracked.

- He can View the data that was tracked and update it by pressing Update Data button and apply filtering methods to View the data.
- Or he can save the data that was tracked;If a filtering method was used then data outputted will be influenced by the filter.
- Or he can open and view a data that was saved before.

## 2 Basic and alternate flows of use cases.

### Initialization Form.

Basic flow.(Offline)

- Local/Offline user is given ID.
- Press Continue

Alternate flow.(Local)

- Local/Offline user is given ID.
- Input User Pass and check Allow online
- Press Continue

Alternate flow.(Admin)

- Local/Offline user is given ID.
- Input User Pass and check Allow online
- Add ID and User Pass.(How many Admin desires)
- Press Continue

### Selection Form.

Basic flow.(Local/Offline)

- Local/Offline user Selects the tracking methods.

Alternate flow.(Local/Offline)

- Local/Offline user adds a new tracking method.
- Local/Offline user selects the tracking methods.

Alternate flow.(Admin)

- Admin user selects the tracking methods.
- Local/Offline user selections get overwritten.

## **Output Form.**

Basic flow.

- User presses Update.
- User Views the data.
- User Saves the data.

Alternate flow.

- User filters the data.
- User presses Update.
- User views filtered data.
- User Saves the data.

Alternate flow.

- User opens a data file.
- User Views the data.
- User filters the data.
- User presses Update.
- User views filtered data.
- User Saves the data.

## **Conclusions**

In this laboratory work i learned how to create Use Case diagrams and that they describe behavior of the system. Another purpose of Use Case diagrams is to show the interaction between actors and the application.



## References

- 1 Learn Unified Model Language,<https://www.tutorialspoint.com/uml/>
- 2 Wikipedia,[https://en.wikipedia.org/wiki/Unified\\_Modeling\\_Language](https://en.wikipedia.org/wiki/Unified_Modeling_Language)
- 3 Notes on UML course given by professor and laboratory assistant.
- 4 Use Case Examples – Effective Samples And Tips [http://www.gatherspace.com/static/use\\_case\\_example.html](http://www.gatherspace.com/static/use_case_example.html).