Task 3.3

1. List of tasks users complete within the system.
   - Determine time of trains to arrive in a timely manner to class.
   - Identify the closest train/bus station to user's house.
   - Travel from home to nearest station.
   - Ensure Myki has funds on it to travel on public transport.
   - Check train is going to the station you wish to get off at.
   - Board train/bus, find a place to sit or stand.
   - Get off train at correct station.
   - Walk from the station to class.
   - After last class for the day, return to station.
   - Wait for train
   - Board train and travel until destination station.
   - Travel from destination station to home.

2. Frank is currently studying his second year at Swinburne University and is require to travel to the university on a daily bases to attend classes. Frank has yet to obtain his driver's license and is required to travel by public transport to the university.

   Frank is lucky and lives five minutes away from the station and is able to walk to the station each morning. However Frank has classes that start at a different time each day. To ensure Frank is able to catch a train that will allow time for him to arrive in time for class, he checks the train timetables each morning on the Metlink website.

   After having checked train times online, Frank then determines the time he needs to leave his house in order to arrive at the station 10 minutes before the train he plans to catch based on how long it will take for him to walk from his house to the station.
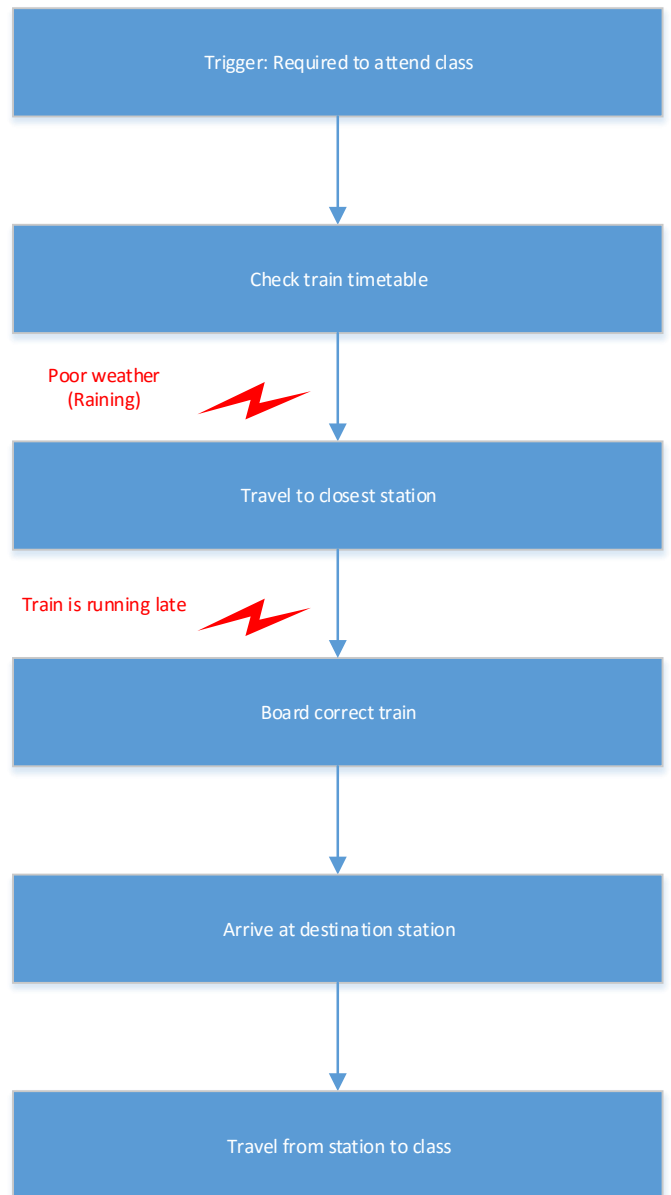
   Once he arrives at the station Frank checks that he has enough funds on his Myki card in order to pay for his travel into University. If his card is running low on funds, Frank uses the 10 minutes before his train arrives in order to add additional funds to his card.

   When the train arrives Frank boards and finds a spot to sit, or depending on the time of day stands if no seats are available. Frank is aiming for a high distinction in most of his classes and spends his time on the train completing task work and reading class material on his laptop, if he was able to find a seat. While he is doing this, Frank makes sure he is aware of the stations he is passing so he does not miss his stop.

   Upon arriving at the station before his destination, Frank returns his laptop to his bag and prepares to exit the train at the next station. Once Frank arrives at the station and exits the train, he then navigates his way to the class he is attending.

Sequence Model

Intent: Get to university

Trigger: Required to attend class

Check train timetable

Poor weather
(Raining)

Travel to closest station

Train is running late

Board correct train

Arrive at destination station

Travel from station to class

Hierarchical task inventory

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                          ┌──────────────────┐
                          │ Travel to University │
                          └──────────────────┘
              ┌───────────────────┼───────────────────┐
     ┌──────────────┐     ┌──────────────┐     ┌──────────────┐
     │ Check Class    │     │ Check Weather │     │ Find travel to │
     │ Timetable      │     │               │     │ station        │
     └──────────────┘     └──────────────┘     └──────────────┘
            │                                            │
     ┌──────────────┐              ┌──────────────┐ ┌──────────────┐ ┌──────────────┐
     │ Check Train    │              │ Check if parents│ │ Travel to    │ │ Walk to      │
     │ Times          │              │ are home       │ │ station      │ │ Station      │
     └──────────────┘              └──────────────┘ └──────────────┘ └──────────────┘
                                   ┌────────────────────┼────────────────────┐
                            ┌──────────────┐    ┌──────────────┐    ┌──────────────┐
                            │ Board Train   │    │ Wait for train │    │ Check Myki    │
                            │               │    │               │    │ Balance        │
                            └──────────────┘    └──────────────┘    └──────────────┘
              ┌──────────────┬────────────┐          ┌────────────┬────────────┬────────────┐
     ┌────────┐ ┌──────────┐ ┌──────────────┐ ┌──────────────┐ ┌──────────────┐ ┌──────────┐
     │ Stand  │ │ Find Seat│ │ Select Payment│ │ Place Card on │ │ Insert Money │ │ Collect  │
     │        │ │          │ │ Method         │ │ Machine        │ │               │ │ Card     │
     └────────┘ └──────────┘ └──────────────┘ └──────────────┘ └──────────────┘ └──────────┘
                    ┌──────────────┬────────────┐
          ┌──────────────┐ ┌──────────────┐ ┌──────────────┐
          │ Check Social   │ │ Use laptop to │ │ Play Games on │
          │ Media on Phone │ │ study          │ │ Phone          │
          └──────────────┘ └──────────────┘ └──────────────┘
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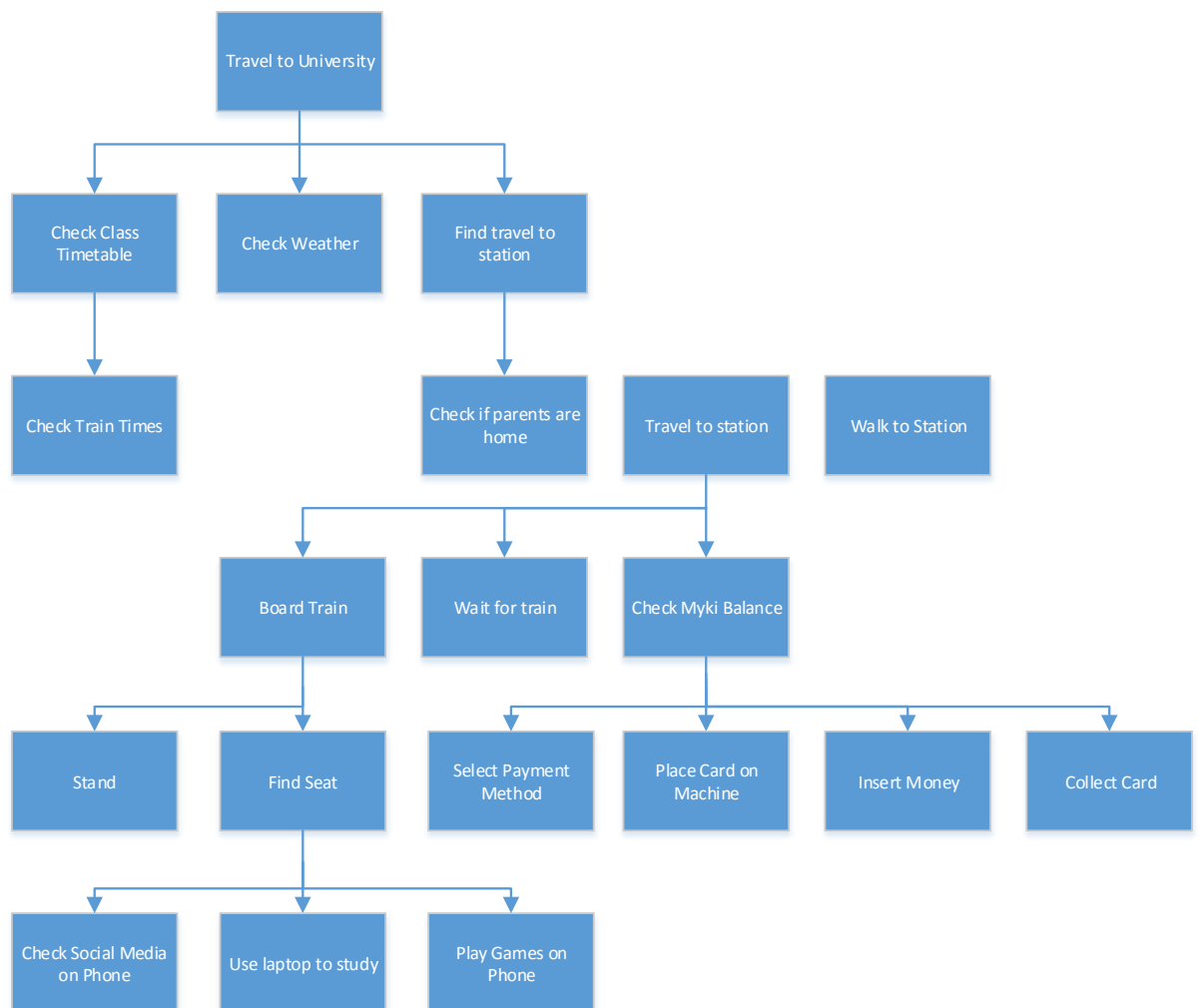
Essential Use Case

1. List of important subtasks:
   - Checking train times
   - Finding travel to station
   - Travelling to station
   - Checking Myki Balance
   - Finding seat on train

2.

User Intention	System Responsibility
1. Student checks time table on website	2. Display times of all trains for selected line
3. Student identifies time they need to arrive at station by	
4. Travel to station by determined time	
5. Check Myki Balance by placing card on machine	6. Myki machine display balance
	7. Prompt user to select top up method
8. Select Top up method	
9. Insert payment	
10. Wait for train	
	11. Train arrives at or after listed time
12. Board Train	
13. Find seat	
	14. Train travels to destination station
15. Exits train at destination	
16. Travels from station to class	

3. Based on the task analysis activities the main features which our system will need to supply to satisfy user goals are:

- A way for the user to organise reliable transport methods to and from university.
- The ability to see and manage the cost of selected ride.
- Being able to contact the driver after organising a ride.
- Feeling comfortable and safe about the driver they have selected to travel with.