User Stories:

1. As an end-user, I want to be able to have access to all tickets I have booked across multiple accounts so that I can claim back the costs on expenses.

   Evaluation using the INVEST strategy:

   This is only describing one concept – the linking of accounts – therefore it is independent. This is a valuable story because it details the high-level concept required – the core reason for this project. It is also a very small user story which can easily be tested later. If the two accounts can link, we know that we have fulfilled this requirement.

   Refinement into implementation tasks:

   - Create at least two sample transport applications with fake accounts set up
   - Integrate the customer API into both websites
   - Conduct thorough testing to ensure that both applications can communicate

   Priority:

   Must have

2. As an account owner, I want to know that information regarding my journeys using different modes of transport is kept safe so that third parties are not able to ascertain geographical information about me.

Additional Information:

I want to know that my travel information is securely shared among accounts. If it were to be intercepted by a third party, this would be a severe privacy issue with hackers being able to triangulate where somebody lives or have access to their daily schedule and movements.

Evaluation using the INVEST strategy:

This is independent of anything else, focusing solely on the security of data as it is transferred between accounts. It is negotiable as we can talk to the customer about how secure the information must be and how best to secure it. It is very valuable as it draws attention to the fact that the information, we are transferring might not seem sensitive at first glance but could be used in many malicious ways. It is estimable because we can narrow it down to some measure to take to secure the data and then evaluate each smaller step individually. The security of our solution will also be testable, perhaps even by using some security testing tools.

Refinement into implementation tasks:

- Understand the security issues that might arise from during this project
- Define the network protocols which will be adopted to ensure user data safety is maintained
- Design the system with these protocols in mind

Priority:

Should have

3. As a user of public transport, I want my account to display the details of my upcoming details very quickly when I am in a hurry, so that I can get to the train/bus/ferry on time.

Additional Information:

I might need quick access about where my next journey is – which train station, for example. I do not want to be stuck waiting for this information to load on my phone.

Evaluation using the INVEST strategy:

This describes the time efficiency of using the account only so is independent. We can negotiate how quickly we would like the application to respond. It is valuable as it illustrates the need for an efficient solution. This is important data to the customers, and we do not want to be causing them any unnecessary waiting. It is estimable because we can decide how to create an efficient solution and what steps will be required. Finally, it is testable in the end by performing usability testing and analysing the results.

Refinement into implementation tasks:

- Once we have decided on the way to mimic a transport application, we must evaluate how efficiently it will run
- Analyse the trade- off between an efficient solution and a complex solution and come up with a strategy

Priority:

Should have

4. As a public transport account, I want to be able to lookup all other public transport accounts and store their names, so that the accounts can be linked.

Additional Information:

I want there to be a central database storing mappings from keys to company names.

Evaluation using the INVEST strategy:

This independently describes the function of the operators API. It is valuable because this is the second core reason for this project. It is small, clear and can easily be tested at the end of the project. This proof of concept is the very reason we have been employed by the customer.

Refinement into implementation tasks:

- Create the operators database
- Decide how to host this database
- Integrate the operators API into the applications to query the operators database

Priority:

Must have

5. As an account owner, I want to be able to access my upcoming transport tickets in a simple, clear and aesthetically pleasing format so that there are no misunderstandings about the tickets I have ordered.

Additional Information:

By this I mean a usable, easy to navigate interface which conforms with HCI standards.

Evaluation using the INVEST strategy:

This story isolates the concept of HCI and creating a user-friendly solution. It is negotiable as we can decide what aspects of usability are necessary to the project. Additionally, it is valuable as it highlights the need for a user-friendly solution – without one the solution would not be deployable. It can be narrowed down to separate concepts and estimated. It is concise and testable. Usability testing such as surveys or log data can be used to collect data and analyse the success of the tasks.

Refinement into implementation tasks:

- Create wireframes to plan the layout of the system, anticipating any usability issues before they even arise
- Conduct thorough usability testing to gain the users' perspective

Priority:

Could have (as this is only a proof of concept so need not consider the interaction with users in much depth)

6. As a software developer employed by a public transport company, I want to have a clear set of instructions to allow our company's account to link to others, so that customers will be more likely download our app.

Additional Information:

These instructions might be in the form of effective documentation to integrate an API into my code.

Evaluation using the INVEST strategy:

This is independent as it focusses on the need for documentation. It is negotiable as there is currently some documentation, but more would be helpful for future developers. It is valuable as it highlights how integrating the API is not a simple process and some documentation would be appreciated in the future. It can be estimated how long this would take and whether it is manageable in the time scale available. It is short and also can be tested. If we have documentation at the end that expands upon the current documentation, we could make this open to future developers.

Refinement into implementation tasks:

- While implementing our own solution, ensure that we keep track of what we have done and how we have done it in a progress diary
- Use this progress diary to outline the process in formal documentation

Priority:

Could have (would be nice to leave some guidance to future developers if time allows us to)

7. As a busy commuter, I want to be able to see my upcoming travel on my phone so that I can be kept up to date on the go.

Evaluation using the INVEST strategy:

This is independent of anything else discussed, drawing attention to the need for a portable solution. It is negotiable as it can be discussed what types of devices are most important. It is valuable as it explains why the solution must be accessible on different devices. It is estimable as we can isolate the area that needs to be addressed and what strategy will be used to make it a success. It can also be tested as we can perform usability testing on several devices at the end of the project.

Refinement into implementation tasks:

- Decide on the tools and languages which will be used to build the solution
- Ensure that usability testing is carried out on a variety of devices

Priority:

Could have (Again because the user experience is not necessary at this stage)