In the field of Computer Science, testing plays an essential role in ensuring a software system is and remains reliable and efficient. Software systems are tested at every step of the development lifecycle, from the early stages of requirements gathering and design, all the way to deployment and maintenance. Through testing, we can identify a program’s flaws, faults and vulnerabilities, which can be addressed before releasing the final product. Testing also helps validate that the program adheres to the intended specifications, performs as anticipated, and produces the required results.

The application’s main focus is that of managing a user’s trips and trip itineraries and the possibility of gathering all the necessary information for a trip in a single application. After logging in, a user is able to create a new trip. He is required to offer some information on the trip, such as the number of participating people, destination, dates, and so on. The created trip is saved on a user’s profile, and it can be edited after being saved as well. When editing an already existing trip, the user can add information on other fields. These fields include essential information about the trip, like the plane / train ticket, the location of the accommodation (which will be able to be opened in Google Maps). Furthermore, the User can create an itinerary, where day-by-day planning can be made.

Regarding unit testing, one of the features that can be tested can be the creation of a trip. While some fields have as input values button-like fields, there are a couple of trip fields that require manual input. These could be the target of unit testing,. In this way we can check if input errors are detected and handled accordingly.

Integration testing can also be applied, as there are multiple components that interact with one another. Being a mobile application, these components could be considered

System testing will be applied when testing different scenarios and flows of the application. One such flow could be the creation and editing of a trip, where a user starts from the screen for the trip creation, and enters all the required information of a trip, while also trying to offer incorrect or invalid inputs to see whether these are detected and presented in a user friendly manner. Then, the user should move to the list of user created trips, and edit one of the existing trips. Here, the user should try adding, changing or deleting information to see if they are correctly saved.