**Task 1**

**Implementation 1: Strengthening the user profile**

The login function was modified to allow a new user to add credit card details (card number, date of expiry, name on card and CVV) for an arbitrary number of credit cards during registration. The UserAuthenticator.register function was modified to accept an additional input parameter cards representing the credit card details and add these details to the users.json file. If the user is registered, the modified login function returns the user’s login information represented as a dictionary containing the credit card details. The User class was extended to include these details. Finally, the user\_credit\_card\_data.py file was added containing the change\_credit\_card\_details function to allow a user to change these details in the users.json file.

**Implementation 2: Strengthening the payment system**

The checkout function was modified to ask the user whether he wants to use his wallet or a card for payment. If “card” is selected, the function displays the list of his cards and asks which card the user wants to use.