

1.3.4 Iteration 3: Addressing Quality Attribute Scenario Driver

In this section we build on our fundamental structures from iteration 1 and 2 with a focus on QA-6: Usability.

1.3.4.1 Step 2: Establish Iteration Goal by Selecting Drivers

The goal for this Iteration is to focus on Quality Attributes QA-6 which is to make sure that the application should be intuitive and should have a small to no learning curve to the users.

1.3.4.2 Step 3: Choose one or more Elements of the System to Refine

The element that we chose to refine for this iteration is the frontend as a whole. Because our architecture allows the frontend and backend to be highly decoupled - we have the luxury of focusing one or the other without our changes affecting each other in a dramatic way.

1.3.4.3 Step 4: Choose one or more design concepts that satisfy the selected drivers

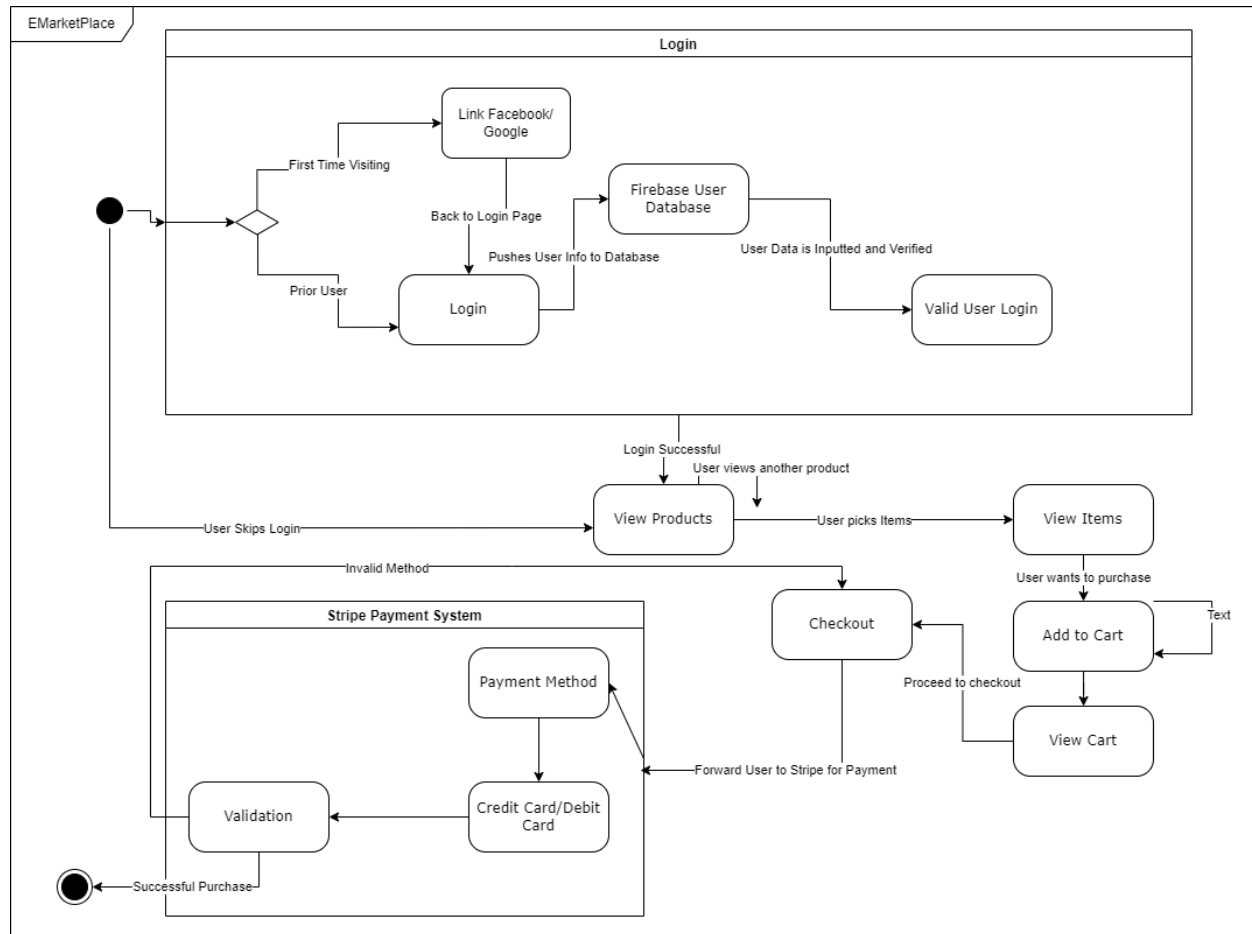
The design concepts used for this iteration are the following:

Design Decisions & Locations	Rationale
Building a single page application using Angular	This is a great frontend framework built by google. It is a well-documented and tested framework that is very popular in the industry at the moment. It is also a highly performant framework as well. This is also where our team is most experienced. - maintainability

Alternatives	Reasons for Discarding
React.js	React is a great framework that we like very much. But considering that Angular ships with typescript out of the box as well as its more structured way of creating applications we preferred it over react.js. We are also more familiar with Angular so that will streamline the development process a little bit.

Design Decisions & Locations	Rationale
Implement caching	We decided to implement caching on the frontend to help reduce the load on our servers and databases.

Alternatives	Reasons for Discarding
Make requests every time you login	Having to login every time you access the site is not something that the users enjoy doing. These logins also cost us money each time the user logs in - since we are using a third party login system.



1.3.4.6 Step 5: Review iteration

The goal for this iteration focuses on Quality Attributes, QA-6 which is to make sure that the application should be intuitive and should have a small to no learning curve to the users. We made major decisions in regards to the User Interface side of our application. We implemented caching in this iteration to reduce the load on our servers and databases. We also decided to go with Angular as our frontend framework. It is built by google, it is a well-documented and tested framework. These were the results of our iteration 3 which we are satisfied with.