**2. Overall Description**

* 1. **Product perspective**

As a result, an entirely new mobile app will be developed that uses Yandex maps as additional service. Tracking the user's location will be performed with the help using the built-in sensors of the mobile device. Yandex Map API is responsible for displaying available stores and building the path to them.

The detailed architecture of the program and its interaction with third-party API will be described below.

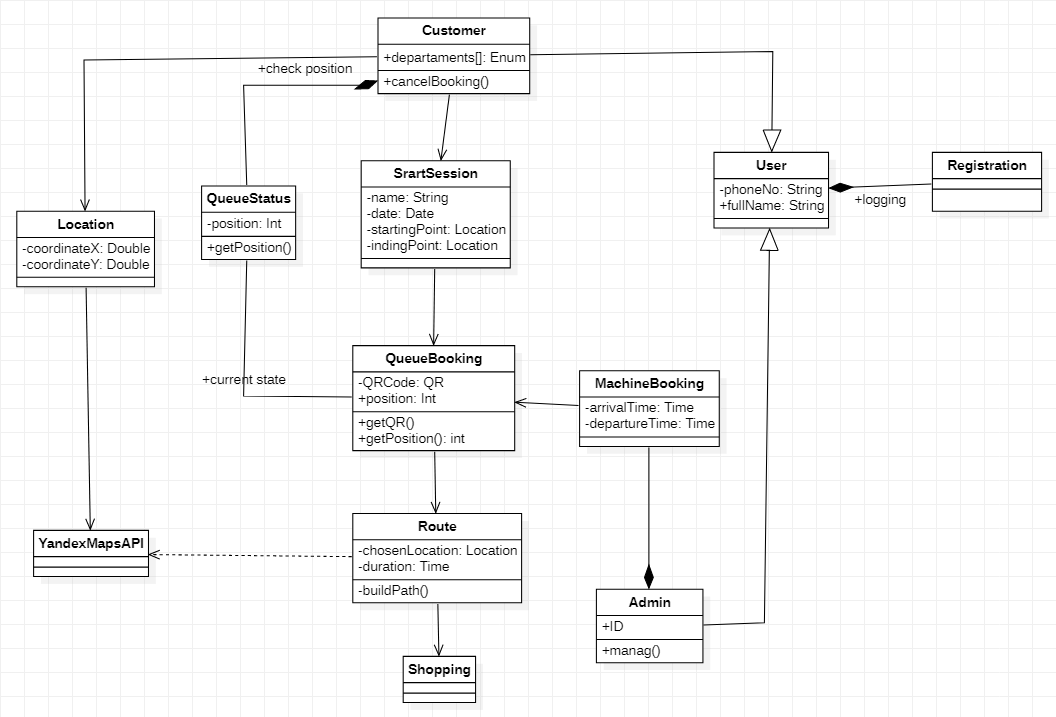


Figure 1 Class diagram

As we can see in the photo, after user registration, a session begins, followed by a block responsible for the queue process, including generating a QR code and retrieving a position. It is worth noting the *MachineBooking* class, which is responsible for generating a position in the queue while in the store. The next step is to build a route if the session is performed via the device and the Yandex Maps API.

Using the status diagram, the typical purchase lifecycle is described below: from the start of registration to the end of the session.

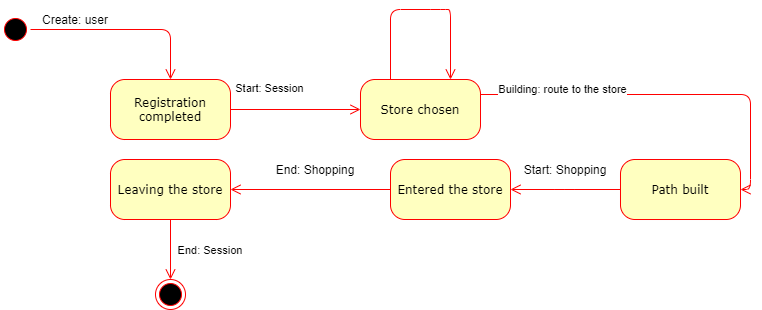


Figure 2 State diagram