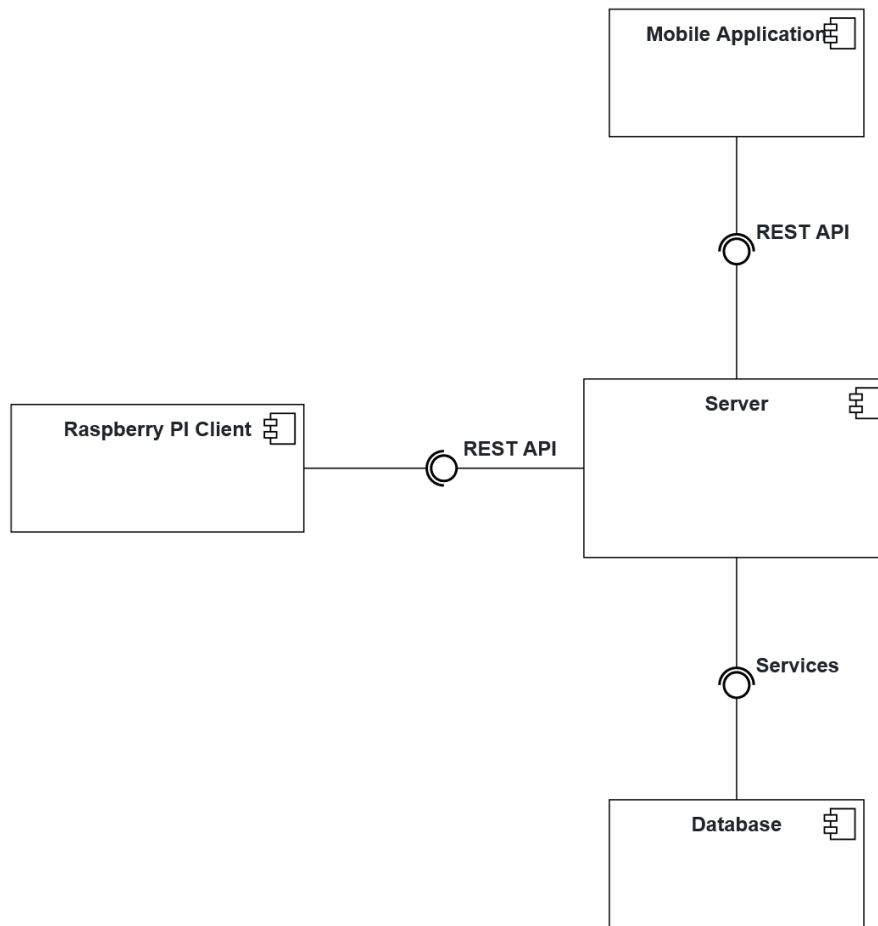


# Smart Cart Project Software Description



Draft: Component Diagram of the Smart Cart Project

- **Mobile Application:**
  - Displays the list of the items placed in the cart.
  - Displays the total price of the items in the cart.
  - At the bottom there is a button to refresh the list of the items, this may be automated with the use of the application coroutines.
- **Raspberry PI Client:**
  - Read the hardware data to identify items placed in the cart.
  - Send the items data to the server.
- **Server:**
  - Stores the data from the Raspberry PI Client in the database.
  - Send the data to the Mobile Application automatically or on demand.
- **Database:**
  - Is located on the server side.
  - Stores the actual list of the items in the cart. Allows less communication with the Raspberry PI Client.

- Possible Improvements:
  - Carts can have unique ID or QR code for the correct identification, so the user can correctly assign the cart in the mobile application.
  - Introduce the mobile application payment process.
  - Synchronize payment process in the market (cash or card) with the mobile application confirmation and the unique ID.