Functional Specifications

**Core Functionality:**

**Customer Request Chaperone**- The creation of transaction begins here, Having a Customer id and two locations, starting and end, this method will instantiate a new a Transaction and place a status of looking for chaperone.

**Chaperone Responds**- This method will place a chaperone on a transaction. The method is called from the Chaperone selecting a Customer to pick up. Transaction is updated with appropriate Status.

**Chaperone Arrives**- Timestamp on Transaction for Customer being pick up. Transaction is updated with appropriate Status.

**Chaperone Escorts Customer**- Time stamp for beginning of journey. Transaction is updated with appropriate Status.

**Chaperone Confirm Destination Arrival**- Timestamp on Transaction that both agree they have made it to the Customers destination.

**Asynchronous –** Program the system to allow for asynchronous operations, allowing for multiple process to occur without being hung up with procedural programming. Provides a better user experience allowing the user to have a more fluid experience while background processes continue to work.

**Customer Rates Supplier-** Method that allows for a larger text block from customer and a rating (Ex. 4 stars) to be added to the Transaction.

**Supplier Rates Customer-** Chaperone has a large text block and a rating system (Ex. 4 stars) to rate the customer added on the Transaction.

**Customer Functionality:**

**Panic Button-** A method that would be used to alert security that a problem has occurred, whether that is police or campus security is to be determined.

**Rate Chaperone-** Large text block and rating passed, added to transaction.

**Cancel Transaction-** Cancels the created transaction, changes status of transaction removing it from available open transaction query.

**Request Chaperone-** Creates a new transaction, User ID, starting and stopping destination are passed in this method. Awaiting Chaperone Status is set.

**Chaperone Functionality:**

**Panic Button-** A method that would be used to alert security that a problem has occurred, whether that is police or campus security is to be determined.

**Cancel Transaction-** Chaperone cancels their arrival, sets the transaction back into looking for Chaperone state. Removes Chaperone from the Transaction.

**Respond to Supplier-** Places Chaperone on transaction and changes Transaction status removing it from the open transaction query.

**Start Travel-** Time stamp on Transaction for beginning of transportation.

**Rate Customer-** Large text block and rating passed, Ex. 4 stars, added to the transaction.

**Shared Functionality Chaperone/Customer:**

**View ratings-** Brings back reviews for person you are looking at, Chaperone or Customer. Pulls list of all reviews and averages ratings from all previous transaction the user is associated with.

**Registration-** Creates a new user in database, passing in Name and Password. Checks against database to see if Username already exist and prompting user about success or failure.

**View History-** Returns list of Transactions for a given user.

**Add Image-** Adds image to profile account, places image in database.

**View Image-** returns stored image in database.

**System Functionality:**

**Create Account-** Takes a Username, password, and which user type they are creating i.e. Chaperone or Customer. Adds new row to database.

**Assign Chaperone-** Assigns a Chaperone to a Transaction, changes status of Transaction.

**View Transaction-** Returns information about given Transaction.

**Modify Transaction-** Updates fields on a Transaction, would need to be overloaded for all variations.

**BI Tools-** Tools for taking care of Chappy program.

**Asnyc Messaging-** Messaging to allow for a fluid presentation to the user of the Chappy App while background process continue to run.