Following are the functionalities that BAM should contain. This is a working document and should be continuously updated as per our needs

**USER STORIES**

* 3 questions:
  + **As a** - professional employed in industry
  + **I want to** - effectively track and control my financials
  + **So that I can** - live efficiently and save effectively for the future

**USER REQUIREMENTS/SPECIFICATIONS**

**User Authentication**

Sign up

* Create new user with email and password,
* Ensure password is off specific length + contains characters + letters
* Add user to the database with unique ID

Log in

* Ask user for email + password
* Check if credentials are valid
* Possibility? -> forgot password to, reset password link sent to user to email that they signed up with

**Add Salary + Money Details**

* Add post tax monthly take home
* Add which currency they’d like to work in -> probably add what country on signup?
* Add saving goals
* Add amount of money in chequing and savings account ->this will be synced up with bank account right? But for now we will just have it as straight input (let me know if i’m wrong)

**Monthly budget breakdown I like this section overall.**

* User can specify how much they would like to spend on what, e.g. Rent, Phone, etc
* Give the user a list of options on expenses that are fairly constant, for example:
  + Rent/Mortgage, Phone/Internet, Utilities are all expenses that are mostly static throughout the month
* Give the user a list of things they’d like to budget for the month, for example:
  + Groceries, Restaurants + Cafes, Entertainment, Shopping etc.
* Give the user the option of receiving an app generated budget breakdown
* Alert user when they’re about to go over budget -> extend to maybe having multiple alerts at like 25%,50%,75% of budget

**Budget Statistics**

* Users can visually see how much they have spent within in each category
* Display pie charts + bar charts

**Adding Transactions**

* Users should be able to add transactions based on type - grocery, food, cinema etc
* Transactions should then be automatically categorized into the budgeting subgroups
* Then increase the

**DEVELOPER SIDE REQUIREMENTS**

**User Authentication**

* When you add a new user, add the user to the database with a uniqueID
* After you get email + password details, store this data into Firebase
* When user logs in you check if user is in the system or not via checking the database
* Look into how to do the forgotten password thing

**Data Input**

* Find a way to connect users with their data (linking through unique ID or email?)
* Firestore vs Real time database
* Each transaction has to include a fields
  + How much money was transacted
  + Which sub group it belongs to
  + When the transaction was done

**Budgeting**

* Need to come up with guidelines of how to split up users’ money
* Come up with types of budgeting templates? (for lack of a better term)

**Constraints and Assumptions**

*User Side*

* When entering prelim. Information the user’s country will also set their currency. We will also have an option to set this individually afterwards
* We will have default categories of budget spending including a catch-all category of Other. We will also give the user options to add more (ideally) in the future.
* Password and username will have have specific character count minimums or limits and will require the user to put in special characters (will not include space)
* Once logged in there should be an option to stay logged in?
* Does not update unless connected to internet.. duh.

*Cloud Side*

* We have databases in the cloud. One is the bank and one is our application
* Cloud database will simulate a bank account transaction list
* Transactions will contain meta tags for sorting
* Transactions will be available to the user as soon as they are updated in the cloud bank database
* The bank account cloud based database is only here to simulate the bank/bank account. In reality for our application we would only have the application cloud database