**Sleepware - Team 4**

**Account**

1. Account()
   1. Initialize username
   2. Initialize password
   3. Initialize email
   4. Initialize confirmationCode
   5. Initialize createAccountButton, signUpButton
   6. Initialize user
2. createAccount()
3. if(user hits createAccountButton)
4. Show create Account Page
5. Wait for user to enter a username and password
6. Check username availability
   1. if(username is available)
      1. Username = usernameInput
   2. Else
      1. Show username invalid message
7. Check password security
   1. if(password meets criteria)
      1. Password = passwordInput
   2. Else
      1. Show password invalid message
8. if(user hits signUpButton)
   1. Send account creation confirmation email with confirmationCode
   2. Show confirmation code prompt
   3. if(confirmationCode == input)
      1. Show home page
      2. createAccount();
   4. Else
      1. Show confirmation error message
9. enterLogin(username, password)
   1. if(user hits loginButton)
      1. Show login page
      2. Wait for user to enter a username and password
      3. if(storedUsername == username)
         1. if(username is in use)
            1. Compare input password and password associated with user
            2. if(storedPassword == password)

Show home page

currentUser = databaseUser

* + - * 1. Else

Show incorrect password message

* + 1. Else
       1. Show username invalid message

**Alarm**

1. Alarm()
   1. Initialize alarm
2. newAlarm()
   1. If (user hits newAlarm)
      1. Add new alarm to list
3. changeAlarm()
   1. If (user hits changeAlarm)
      1. Update alarm on list
4. deleteAlarm()
   1. If (user hits deleteAlarm)
      1. Remove alarm from list
5. displayAlarm()
   1. If (user hits displayAlarm)
      1. Display alarm
6. setAlarm()
   1. If (user hits setAlarm)
      1. Set alarm to true
7. deleteDevice()
   1. If (user hits deleteDevice)
      1. Remove selected device from devices list
8. linkDevice()
   1. If (user hits linkDevice)
      1. Open bluetooth menu to link device

**Dream Journal**

1. DreamJournal()
   1. Initialize journalName
   2. Initialize entries
2. createJournal()
   1. If (user hits createJournal button)
      1. Created journal appears on screen
3. editJournal()
   1. If (user hits editJournal button)
      1. Show editable journal on screen
      2. Change date and time edited
4. deleteJournal()
   1. If (user hits deleteJournal button)
      1. Delete journal from list

**Dream Journal Entry**

1. DreamJournalEntry(name)
   1. Initialize text = “”
   2. Initialize date to device time
   3. Initialize time to device time
   4. This.name = name
2. displayEntry()
   1. If (user hits displayEntry button)
      1. Show journal entry on screen
3. editEntry()
   1. If (user hits editEntry)
      1. Show editable journal entry
      2. Change date and time edited to current device time
4. deleteEntry()
   1. If (user hits deleteEntry)
      1. Remove journal entry from list

**Sleep**

1. Initialize sleepTracker
2. if(user selects SleepTracker)

i. Display Tracker page

ii. Display periodical graph

iii. Displays bluetooth device connectivity

1. Connect bluetooth device
2. Toggle bluetooth on from device
3. Toggle mobile device bluetooth
4. if(user has Smartwatch to connect)

i. Read(user input) Heart rate and wake-up time overnight

ii. Rem-Cycle Detection

iii. Device connectivity created

1. Tracker Interface
2. Initialize period of tracking
3. Analyze graph

* Displays(line graph) == correlation between hours slept AND # of wake-ups

1. Analyze heart rate during sleep

* Displays == heart rate AND beats each minute(bpm)

1. Analyze amount of wake-ups

* Displays == heart rate jump OR constant movement