Healthy Behavior Research Kit App

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The Healthy Behavior Research Kit App
A new way to track healthy behaviors

- Built upon a framework of proven components:
  - Apple's Research Kit, Health Kit and Watch Kit
  - Sage Bio Networks Bridge SDK and Synapse Platform
- Leveraging new innovative activity planning, tracking screens, tasks and surveys to capture healthy behaviors from research participants and the general public
  - Plan / Track / Reward - Give the users positive feedback and help them while at the same time collecting valuable research data
- Capatilzing on the fact that most people always have their cell phone with them and showing them how it can be an important tool to healthy behavior
  - Planning to live healty
- Enabling them to share for research with a broader community
  - Tracking and sharing their progress through the App

Innovative Activity Tracking for Sleep

- Planning for a Good Nights Sleep
  - User define the target sleep pattern (time and duration)
  - The app reminds them when to go to bed
- Healty Behavior App as a night stand alarm clock:
  - Tap when you go to bed
  - Tap when you have trouble sleeping
  - Tap when you get up
  - All interactions recorded
- First thing in the morning survey:
  - How was your nights sleep
  - What does your spouse say?
- Awards / Badges
  - Weekly Award for completing survey
- Reporting
  - See how you are doing with charts tracking your progress

Innovative Activity Tracking for Sedentary Behaviors

- Planning to be Active
  - Pre-define your goals for activity EVERY Day
- Apple Health Kit and Watch Kit Integration
  - Track the amount of time in a sedentary position over the course of a day
  - Cross reference to location and time of day and day of week
- TV Time and Game Time Survey tracker
  - Record events throughout the day
- End of the day - How did you do tracker
  - Summarize or complete missing surveys
- Awards / Badges
  - Daily Award for "getting on up and moving around"
  - Weekly Award for completing surveys
- Reporting
  - See how you are doing with charts tracking your progress

Innovative Activity Tracking for Nutrition

- Planning your Meals
  - Pre-define your goals for meals OR track on the fly
  - Research and Record calories
  - Track your individual "Bads" and "Goods"
- Good eating bingo
  - See if you can check on the boxes on food groups by meal times
- End of the day - How did you do tracker
  - Summarize or complete missing surveys
- Awards / Badges
  - Daily Award for "staying on track"
  - Weekly Award for completing surveys
- Reporting
  - See how you are doing with charts tracking your progress

Innovative Activity Tracking for Physical Activity

- Planning you Exercise
    - Users define their goals for exexercising
- Apple Health Kit and Watch Kit Integration
    - Track the number of steps per day
    - Track the amount of time in workout mode
- Take your own Challenge
    - Participants set their goals for exercise along with reminder times
    - The app notifies them it's time to work out
- End of the day - How did you do tracker
    - Summarize or complete missing surveys
- Awards / Badges
    - Daily Award for "staying on track"
    - Weekly Award for completing surveys
- Reporting
    - See how you are doing with charts tracking your progress

Research Kit Helps us Collect the Demographic Information to Cross Reference

- Onboarding work flow:
  - As users register within the application they are given information on what we will collect
  - The user can then decide whether to share the information with us
  - If they don't share with us they can still use the app
  - They are asked a series of questions that capture demographic information
- All information is securely stored and if the user authorizes transmitted to our servers using the Sage Bionetworks Bridge SDK
- This data can later be manipulated with the Sage Bionetworks Snapse Solution
- Note: For Phase 2 of the trial while we will develope the App we will not complete the work to upload the information to the servers or mainulate the data once it is there

Apple Research Kit, Heath Kit & Watch Kit
The Core our Application will be built upon

- Apple Research Kit
  - Open source
  - Well established
  - Designed for data collection
  - Robust security built in
- Apple Health Kit and Research Kit
  - Tracks user activity over the course of the day
  - Monitor health information for the user in real time
  - Provide a secure storage point for user health information

Sage BioNetworks - Bridge Kit and Snyapse How we secure, transmit and report the data

- Bridge Kit is a technology platform designed to support biomedical research studies conducted though smartphones and other sensor devices.
  - Used in several existing Research Kit Apps (mPower, Share the Journey, etc... all 5 of the initial Research Kit apps use this technology)
- Bridge Server and Synapse is a set of software service offerings to provide back-end data collection and distribution for mobile health apps.
  - Export and secure access points to the data with extensive data visualization tools
- These technologies provide the security needed for collecting research information as well as the tools to parse and categorize the data.