

MakeSafe

*Developing a Mobile Application to Assist Probationers with
Better Decision Making*



Requirements Specification

V3.1

COMPUTER SCIENCE DEPARTMENT

TEXAS CHRISTIAN UNIVERSITY

May 5 2015

Revision Signatures

Sign below if you a) have read the entire document b) found the information within to be accurate and c) are certain the document is free of grammatical and spelling errors.

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Revision History

Version	General Description of Changes	Date
V1.0	Initial Draft	10/29/14
V2.1	Grammar updates, summary updated, screen shots updated	01/23/15
V3.0	Final Publication	4/23/15
V3.1	Final Revisions	5/5/15

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1 Introduction

1.1 Purpose

Outlined in this document are the requirements for the MakeSafe project sponsored by TCU's Institute for Behavioral Research.

1.2 Intended Audience

The intended audience of this document is the development team who will design, code, and deploy the new StaySafe android application and KeepSafe. Other audiences will include the customer who will review and signoff on the requirements and Dr. Payne, the TCU faculty sponsor.

1.3 Scope

These requirements are intended to serve as the deliverable functions as a part of the MakeSafe project developed during the Fall 2014 and Spring 2015 semesters. The product assists the IBR staff in the rehabilitation of new parolees.

1.4 References

Matthew Butz, Marcus Beal, Zach Morris, and David James. "StaySafe." IBR. TCU Computer Science Department, 1 Sept. 2014. Web. 09 Dec. 2014. www.brazos.cs.tcu.edu/1415MakeSafe/resources

"Sustainable Disease Risk Reduction Strategies for CJ Systems (DRR-2)." Institute of Behavioral Research. TCU, n.d. Web. 10 Dec. 2014. www.ibr.tcu.edu/sustainable-disease-risk-reduction-strategies-for-cj-systems-drr-2/

Lehman, W. E. K., Rowan, G. A., Greener, J. M., Joe, G. W., Yang, Y., & Knight, K. (under review). Evaluation of WaySafe: A disease-risk reduction curriculum for substance-abusing offenders.

Lehman, W. E. K., Rowan, G. A., Joe, G. W., & Knight, K. (2014). Reducing disease risk behaviors after release from prison. *Offender Programs Report*, 17(6).

1.5 Overview

Section 2 - Overall Description

Section 3 - System Overview

Section 4 - External Interface Requirements

Section 5 - Functional Requirements (System requirements)

Section 6 - Non-functional Requirements (System requirements)

Section 7 - Glossary of Terms

Appendix A - Use Case Models

Appendix B - User Interface Prototypes

2 Overall Description

2.1 Product Perspective

The transition from incarceration to the community is a particularly high-risk period for offenders. During reentry, they are more likely to engage in unhealthy behaviors. Risk reduction approaches that focus on this critical period are needed to increase positive decision-making skills that promote healthy living. In particular, thematic interventions are needed to reduce disease risk behaviors that involve risk of HIV and Hepatitis B and C infection.

The Institute of Behavioral Research (IBR) at TCU first developed and tested an in-prison, group-based curriculum titled WaySafe, targeted toward incarcerated offenders in their last phase of substance-abuse treatment to improve decision-making when they return to the community. StaySafe, based on the WaySafe intervention, consists of twelve self-paced sessions lasting 10-15 minutes for use among community corrections populations. It's important to note that both WaySafe and StaySafe are drawn from an evidence-based practice called TCU Mapping Enhanced Counseling (recognized by the [National Registry of Evidence-based Programs and Practices](#)). The StaySafe tablet app is proposed as a means of providing an engaging, easy to use interface for the intervention.

The MakeSafe senior project, sponsored by IBR, developed the StaySafe application to meet IBR's design requirements. Major objectives of the project included developing the StaySafe app, saving research data (e.g., user selections, usage statistics, and user survey responses), and creating the version-publishing application. The KeepSafe software tool provides the researchers with sustainability, a means of publishing future versions of the application without further developer involvement.

IBR plans to first deploy the intervention in several Texas counties. StaySafe will record application interactions and selections from the user while they working their way through each of the sessions. This data will be transferred upon session completion to a secure central repository for analysis by the IBR.

With the IBR's research experience in the behavioral sciences and the MakeSafe team's software programming expertise, we hope to deliver an effective intervention that guides better decisions and reduces the risk of HIV infection among probationers supervised by the community corrections system.

Funding for this study was provided by the National Institute on Drug Abuse, National Institutes of Health (NIDA/NIH) through a grant to Texas Christian University (R01DA025885; Wayne E.K. Lehman, Principal Investigator).

2.2 Product Functions (high-level)

- Interactive tablet application
- Provides an easy to use interface for probationers to complete sessions
- Three session types are included: introduction, WORK-IT, and participant-choice
- Twelve self-administered sessions 10-15 minutes each
- User interactions with StaySafe are saved for later analysis by the IBR staff
- Saved session data will be transferred to a local machine at the probation office
- Version updates are possible for later field deployments
- Minimal administration and training for operation
- Free to probation departments
- Compatible with a centralized database administered by the IBR team

Tablet application:

StaySafe is the tablet application for Android that provides a simple, intuitive, interface for a population with either limited education or limited computer literacy. There will be twelve sessions lasting approximately 10-15 minutes each. The sessions are divided into three distinct templates each of which has a similar structure. The first session is an initial demonstration followed by eight WORK-IT sessions and three participant choice. Further information is depicted in Section 3.2 of this document. The eight WORK-IT sessions, while following a standard template, will differ in terms of text, audio, and video content.

Research Assistant laptop:

The Research Assistant will have a Windows or Mac based laptop to serve as a mechanism to administer, manage, and track the completed application sessions. Session interaction data will be downloaded from the tablet to the laptop. The data will be added to a controlled database by the IBR staff for subsequent analysis.

KeepSafe:

KeepSafe is a Java application that can run on any windows based laptop running Java version 8. KeepSafe allows for the dynamic content in the StaySafe application to be updated. KeepSafe outputs a JSON file which can be read by the StaySafe application.

2.3 User characteristics

Incarcerated offenders, who can be expected to have limited computer skills, use the StaySafe application. The Research Assistant uses the application to initiate the session for probationers and to export the data.

2.4 Constraints

CNS #	General Description	Customer Validation
CNS01	Limited computer knowledge by probationer (application user).	
CNS02	No wireless connectivity in the parole office.	
CNS03	Solution delivery at the conclusion of the Spring 2015 semester.	
CNS04	The application will be distributed by non-traditional means	
CNS05	Session interaction extracts must be imported to Microsoft Access	

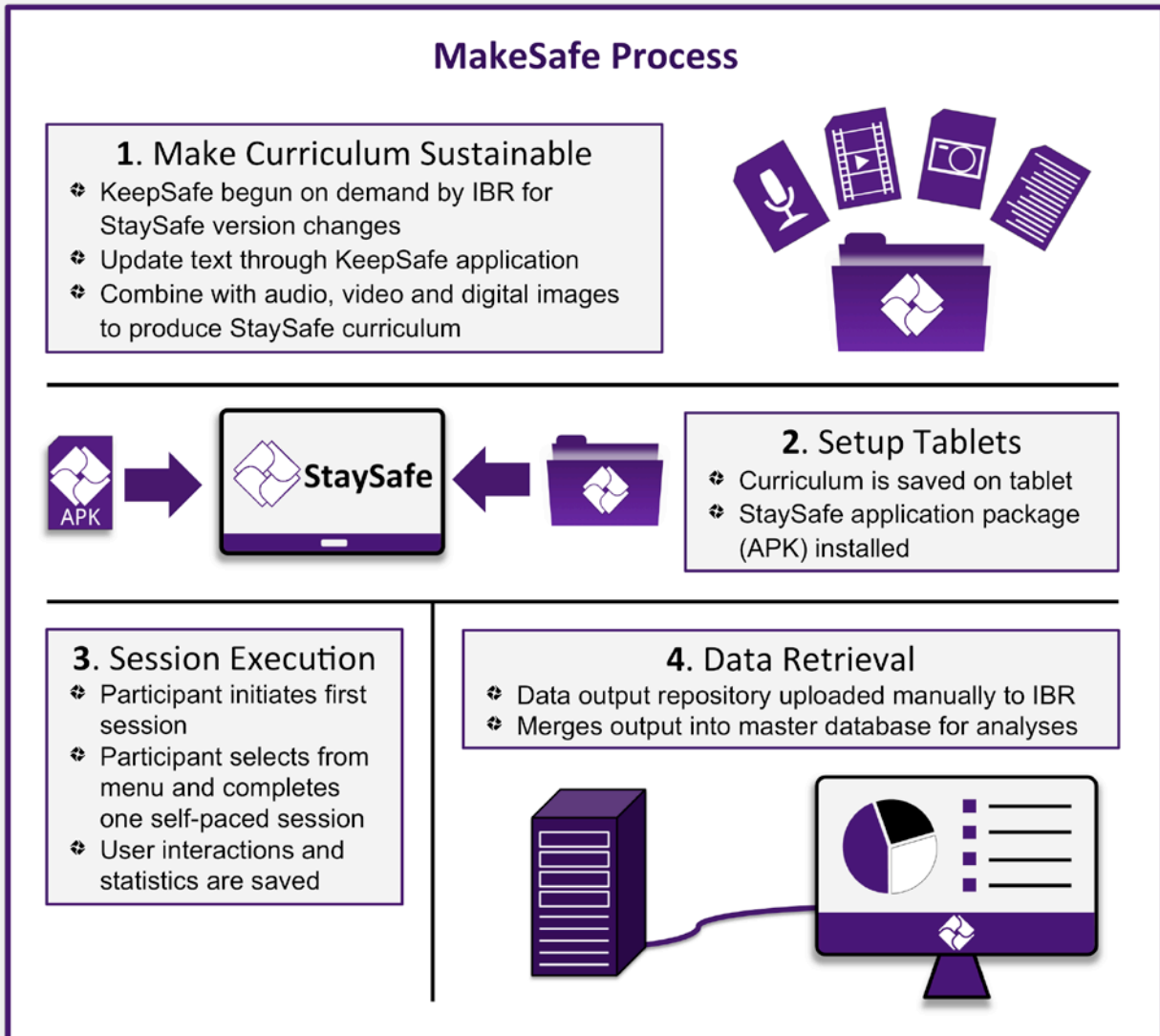
2.5 Operating Environment

The application will initially be used in parole waiting rooms in Tarrant, Harris, and Travis counties.

2.6 Assumptions and Dependencies

- Delivery of design specification from IBR for all three needed session types
- Tablets for testing in December 2014
- IBR must make available all audio, video, and text information
- IBR readily available for project related questions
- IBR must run and complete theater testing by an agreed upon date

3 System Overview



4 External Interface Requirements

The requirements for this project are broken down by both their type (user, functional, non-functional) but also by the major product pieces in this solution.

4.1 User Interfaces

This section describes the logical characteristics of each user interface that the system needs.

4.1.1 Mobile Tablet

REQ #	General Description	Customer Validation
EIR01	Tablet application for Android.	
EIR02	Simple, intuitive, self-administered interface for population with limited education and limited computer literacy.	
EIR03	Twelve sessions lasting approximately 10-15 minutes each.	
EIR04	Hardware buttons on the tablet must be disabled for the probationer.	
EIR05	Research Assistant admin bypass to exit application.	
EIR06	Each sessions starts with Research Assistant sign-in.	

4.1.2 Research Assistant Workstation

REQ #	General Description	Customer Validation
EIR07	Research Assistant should have basic computer knowledge.	

4.2 Hardware Interfaces

REQ #	General Description	Customer Validation
EIR08	Tablet must have micro USB port.	
EIR09	Workstation must have a USB port.	

4.3 Software Interfaces

REQ #	General Description	Customer Validation
EIR10	Mobile tablet running Android KitKat 4.4.	
EIR12	Workstation must support Java version 8.	
EIR12	Session data outputs in .csv format.	

4.4 Communication Interfaces

REQ #	General Description	Customer Validation
EIR14	Research Assistant Mac Computers require additional file transfer software.	
EIR15	Workstation to have internet access capability.	

5 Functional Requirements

Functional Requirements are statements of services the system should provide, how the system should react to particular inputs and how the system should behave in particular situations. These requirements may also state what the system should not do.

5.1 General Requirements

REQ #	General Description	Customer Validation
FRR01	Project shall provide an interactive and instructional tablet application intended to help probationers improve their decision-making skills related to various health risks.	
FRR02	Project shall provide for the recording and saving of probationer responses required for analysis by the IBR staff.	
FRR03	Project shall provide for editing of application content and the release of a revised tablet application.	

5.2 Tablet Application Requirements

REQ #	General Description	Customer Validation
FRR04	The tablet app shall provide interactive and instructional content defined by the IBR staff. See Appendix B.	
FRR05	The tablet application shall provide for multiple instruction sessions based on three templates. Each session shall consist of one template, one selected theme, and one problem choice. Selection of one theme and one problem choice will define the instruction content of one session. It is expected that each probationer will complete twelve sessions.	
FRR06	Research ID, session number, site number, and client number shall be entered by the Research Assistant on the login screen prior to the probationer beginning their session.	
FRR07	The selection of theme and problem choice, defining session content, shall be performed by the probationer. The probationer is allowed to repeat sessions.	

FRR08	Upon completion of one session and subsequent return of the tablet to the Research Assistant, the responses for that session shall be moved onto the Research Assistant’s computer and the probationer’s responses shall be removed from the tablet.	
FRR09	The tablet application shall include audio voice-overs as well as videos that are defined for each individual session.	
FRR10	The tablet application shall monitor the time spent on interactive pages and gently prompt the user to “move forward” after a pre-determined period of time. Time statistics will be included in the session’s recorded data.	
FRR11	If a session is not completed no response or interaction data will be saved.	
FRR12	The tablet app shall provide a way for the Research Assistant to exit the application and restart a session.	
FRR13	The back button on the tablet should be disabled while the probationer is working through a session.	

5.3 Research Assistant Workstation

REQ #	General Description	Customer Validation
FRR14	The Research Assistant’s machine shall have a data source capable of supplying information needed for the login screen.	
FRR15	Session results from the tablet shall be uploaded onto the Research Assistant’s machine after the completion of each session.	
FRR16	The Research Assistant shall export the saved file to a local directory on the workstation.	

5.4 Database

REQ #	General Description	Customer Validation
FRR17	The Database is an Access Database	
FRR18	Database must be able to read in a .csv file	

6 Non-functional Requirements

Product requirements - Requirements that specify that the delivered product must behave in a particular way, e.g., execution speed, reliability.

Organizational requirements - These requirements are a consequence of organizational policies and procedures, e.g., process standards used and implementation requirements.

6.1 Product Requirements

REQ #	General Description	Customer Validation
NFR01	Application will be called StaySafe	
NFR02	Mobile Tab S - SM-T800NTSAXAR	
NFR03	Android API 19 (4.4, "KitKat")	
NFR04	Only completed sessions will have the user interaction data saved	

6.2 Organizational Requirements

REQ #	General Description	Customer Validation
NFR05	Must display the StaySafe logo	

7 Glossary of Terms

CS: TCU's Computer Science department

DRR2: Disease Risk Reduction project 2

GUI: Graphical User Interface

HBV: Hepatitis B Virus

HCV: Hepatitis C Virus

HIV: Human Immunodeficiency Virus

HTML: Hypertext Markup Language

IBR: Institute for Behavioral Research. The Institute of Behavioral Research (IBR) was established in 1962 by Saul B. Sells to conduct research on personality structure, personnel selection, social interactions, and organizational functioning. See more at www.ibr.tcu.edu.

IDE: Integrated Development Environment

JSON: JavaScript Object Notation

PO: The individual probation officer the probationer will be meeting with.

RA: The individual Research Assistant who will be on-site administering the StaySafe therapy to the probationers.

SD: Security Digital

SDK: Software Development Kit

WiFi: Refers to the wireless communication of network data.

WORK-IT: This is an acronym that depicts the model that we use to flow through the application.

W: What's the problem? Who will be affected by your decision? Who can help with this decision?

O: Think about your Options.

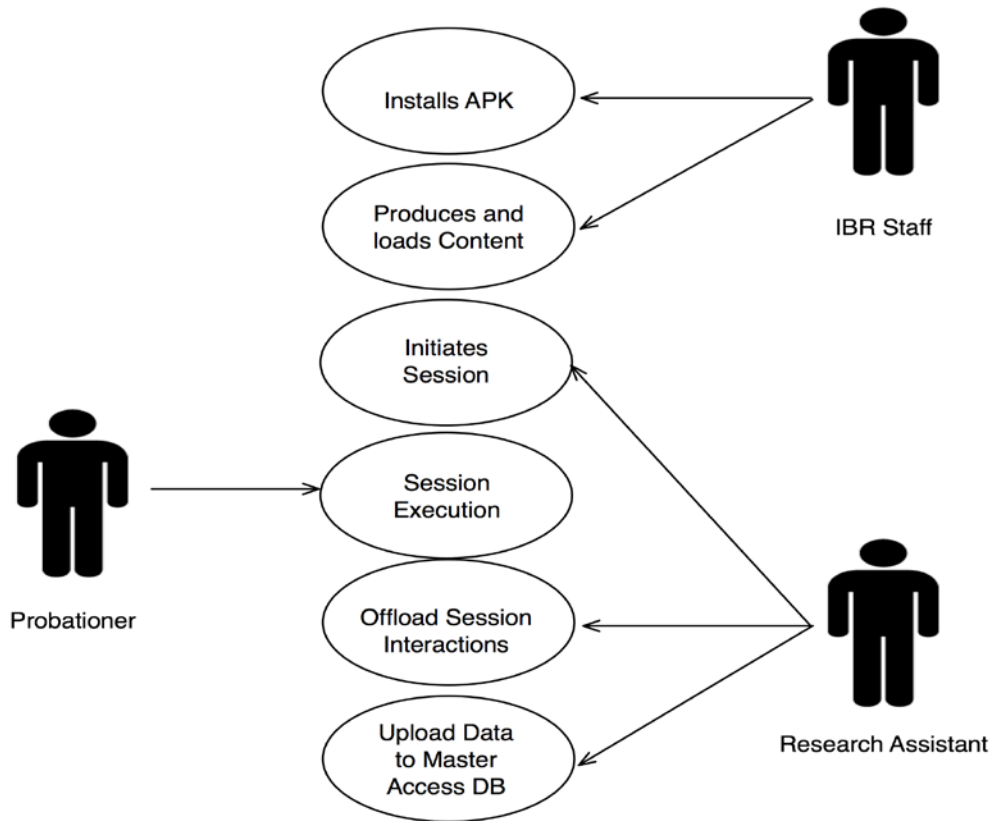
R: Rate your Options.

K: Knowing what decision to make.

I: Imagine how you will turn your choice into action.

T: Time to Test the results.

Appendix A: Use Case Models



Install APK	
Actors	IBR Staff
Description	The IBR staff will install the application file onto the tablet via wireless download or SD card
Data	Files needed for application
Pre-Conditions	Field research begins
Triggers	Tablets are sent to the field
Events	Application is installed

Produces and loads Content	
Actors	IBR Staff
Description	IBR staff uses the java application to edit the content including text, voice overs, videos, and images
Data	Text, voice overs, videos, and images
Pre-Conditions	Previous version data collection and analysis is complete
Triggers	Updated Version is desired
Events	All required source files are saved and updated filed GUI with the correct naming convention and in the correct directories

Initiates Session	
Actors	Research Assistant
Description	The Research Assistant enters private information into the first screen
Data	Session identifiers, i.e., Probationer ID, Site ID, Session #
Pre-Conditions	Application is installed and running
Triggers	Probationer is ready to begin session
Events	Session information is entered and probationer can begin session

Session Execution	
Actors	Probationer
Description	The Probationer goes through the selected session until completion or premature exit
Data	Table elements as listed in section 7.2
Pre-Conditions	RA has entered information necessary to begin the session
Triggers	RA hands tablet to probationer after entering information
Events	Session data is compiled on the tablet for export

Offload Session Interactions	
Actors	Research Assistant
Description	The RA removes user input data off of the tablet after session completion
Data	Interactions between the probationer and the application
Pre-Conditions	Probationer has completed the session and handed the tablet back to the RA
Triggers	Tablet has been connected to Research Assistant's laptop via USB cable
Events	Session data is gathered, extracted, and deleted

Upload Data to Master Access DB	
Actors	Research Assistant
Description	The Research Assistant uploads the data from the local workstation over the internet to the centralized database
Data	Interactions between the probationer and the application
Pre-Conditions	Data has been imported into local database on the RA workstation
Triggers	Data is to be uploaded at the end of each day
Events	Data from the local RA workstation uploaded into the central Access DB

Appendix B: User Interface Prototypes

Screen #: Title

Input	Here you will find input from previous screens. This is not to be confused with user input.
Animated Hand	This item shows what text should be placed in the animated hand.
Voiceover	A word for word account of what the voice over will say.
Next Button dependencies	All items needing completion of before the application can move along to the next Screen.
Saved Items	The set of data items that will be saved and later migrated into the database.
User-driven error prompts	These items will be possible causes for an error prompt.
Notes	Generic notes for the Screen
<i>Screen specific requirements</i>	<i>This will house any requirements that are specific to the Screen that may not be need for all Screens in the application.</i>

Screen 1: Log In

Input	N/A
Animated Hand	N/A
Voiceover	N/A
Next Button	All text fields have data populated by RA. Both research ID fields match.
Saved Items	Research ID, Administration #, Site #, Date, Time, Version
User-driven error prompts	If both research IDs do not match
Notes	For use by research assistant only. Must occur before every patient. Provides ownership in the data that is being collected.
Fields	<p>Research ID: a unique identifier that every probationer will have {0-9999}.</p> <p>Administration #: Corresponds to the next session for the probationer {1 - 12}.</p> <p>Site #: Five digits. First three digits correspond to county number designated by the state. {Harris = 101; Travis = 220; Tarrant = 227} Last two digits are for separate sites within the county {00-99}</p> <p>Date: Auto populated. Format: mmddyy</p> <p>Version #: Auto populated {0-99}</p>

STAYS SAFE

STAYS SAFE – A Virtual Experience

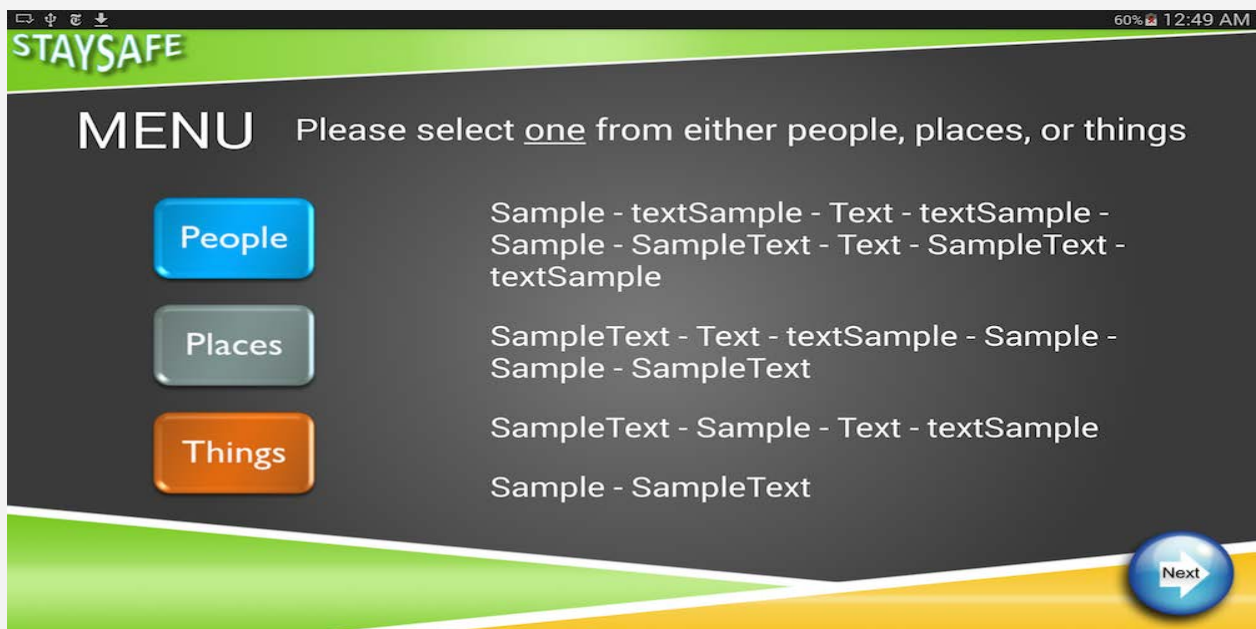
ACTIVITIES TO IMPROVE DECISION-MAKING SKILLS

- ▶ Site Number :
- ▶ Client ID:
- ▶ Retype Client ID:
- ▶ Session Number:
- ▶ Date:
- ▶ Research Assistant ID:

Next

Screen 2: Problem Choice

Input	N/A
Animated Hand	N/A
Voiceover	<i>“Select one theme from either People, Places or Things. Once completed please select the problem to work through.”</i>
Next Button	One problem choice has been selected.
Saved Items	Problem choice.
User-driven error prompts	If the user tries to move on to the next Screen without having selected a problem choice.
Notes	A menu of main themes and their subsequent problem choices.
<i>Structure within Screen</i>	<i>Problem choices are only visible after a theme is selected. If the user changes themes. The previous choice should disappear and the new choices should then appear.</i>
<i>Problem choices limitations</i>	<i>The maximum amount of problem choices for system per theme is ten. Maximum problem choices loaded on the tablet and displayed to the probationer is four.</i>



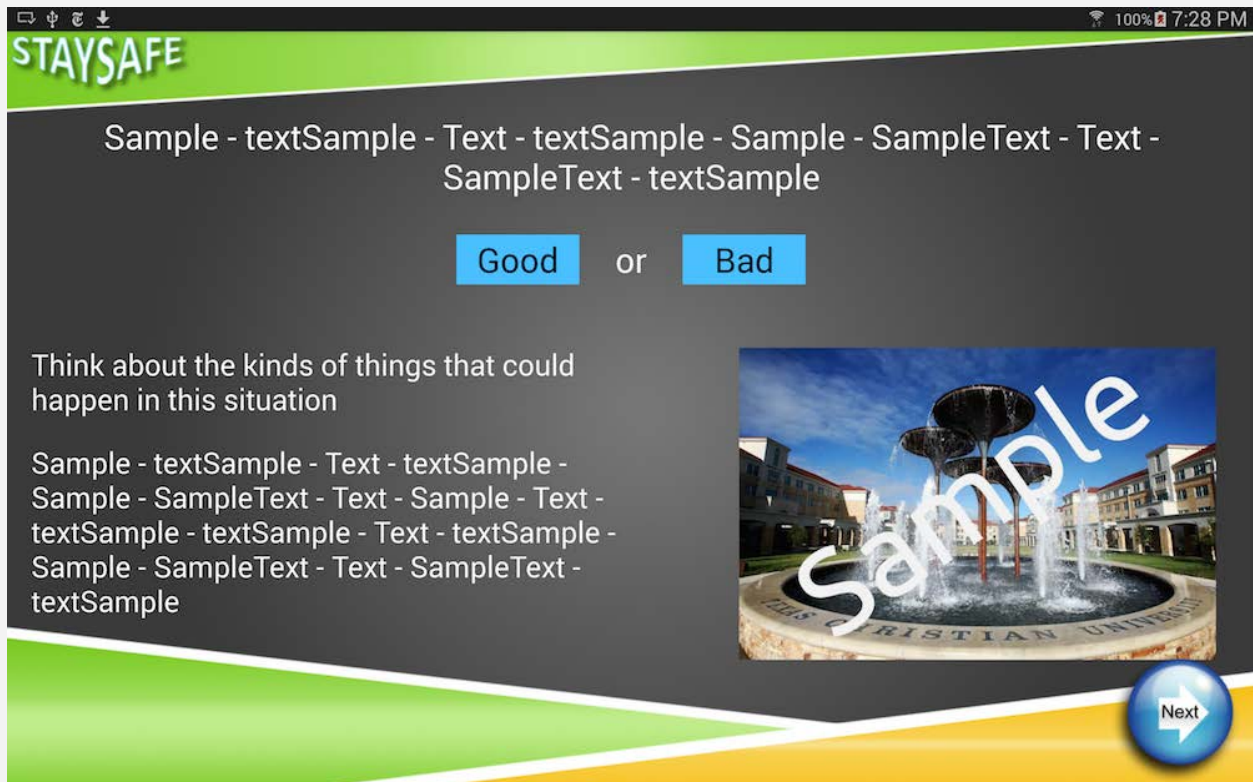
Screen 3: Video

Input	Problem choice from screen 2.
Animated Hand	N/A
Voiceover	N/A
Next Button	Video completion.
Saved Items	N/A
User-driven error prompts	If the user tries to move on to the next Screen without having watched the complete video.
Notes	User needs to click the video to start. Video is unique to problem choice.



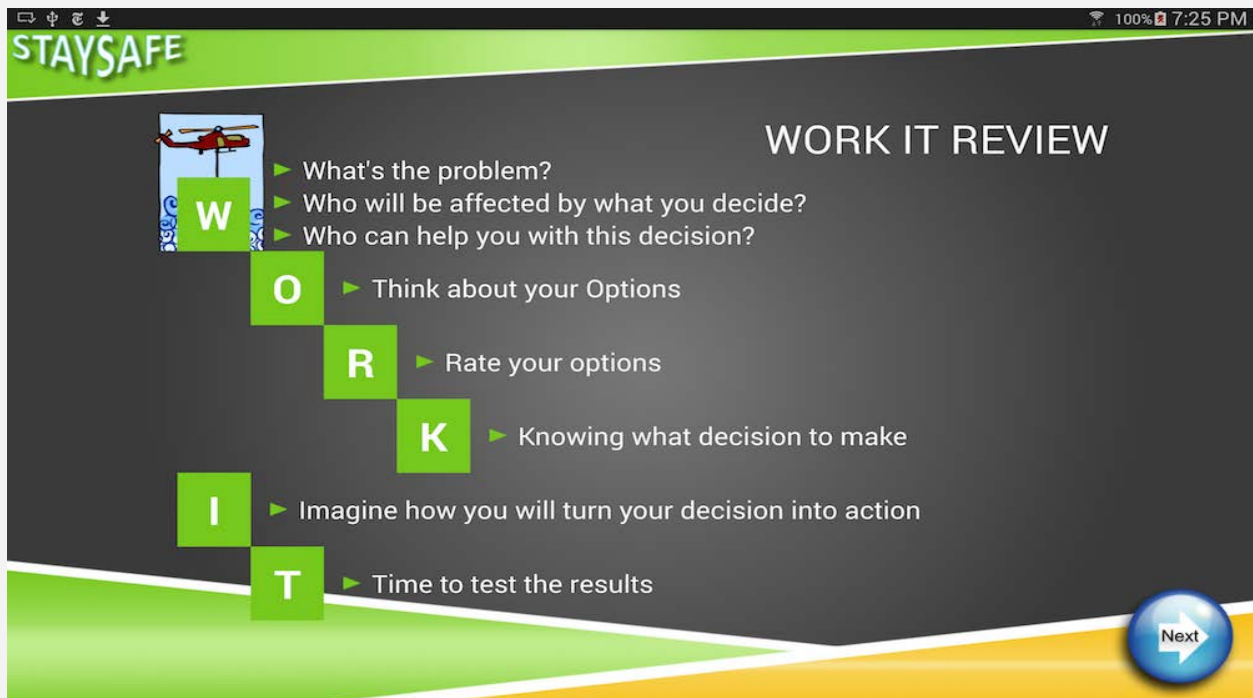
Screen 4: Rate

Input	Problem choice from screen 2
Animated Hand	N/A
Voiceover	"What do you think about the problem that this person made"
Next Button	User selecting either good or bad.
Saved Items	Users rating.
User-driven error prompts	If the user tries to move on to the next Screen without having rated the surrogate's decision.
Notes	N/A
<i>Problem choice consequences</i>	User is presented with the option to see possible consequences of the choice. Options are shown at users request only. Consequences are unique to the problem choice.



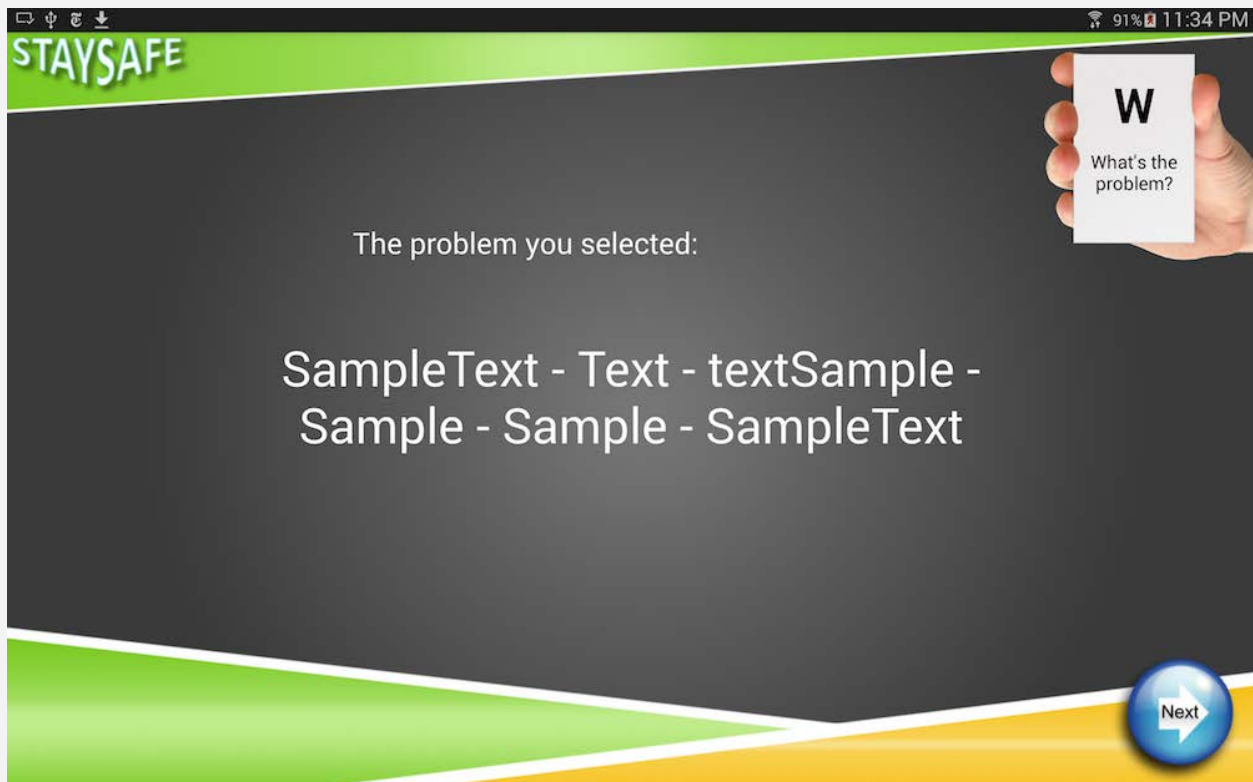
Screen 5: WORK-IT Review

Input	N/A
Animated Hand	N/A
Voiceover	Narration of each item in the review as it becomes visible. See WORK-IT review below.
Next Button	Completion of the review and audio.
Saved Items	N/A
User-driven error prompts	If the user tries to move on to the next Screen without having been through the completed review.
Notes	Every item in the review is partially visible but only one is fully visible at a time. When an item becomes fully visible then the narration for the item will begin.
WORK-IT Review	<p>What's the problem? Who will be affected by your choice?</p> <p>Who can help you with this decision? Think about your Options.</p> <p>Rate your options. Knowing what decision to make.</p> <p>Imagine how you will turn your choice into action. Time to test the results.</p>



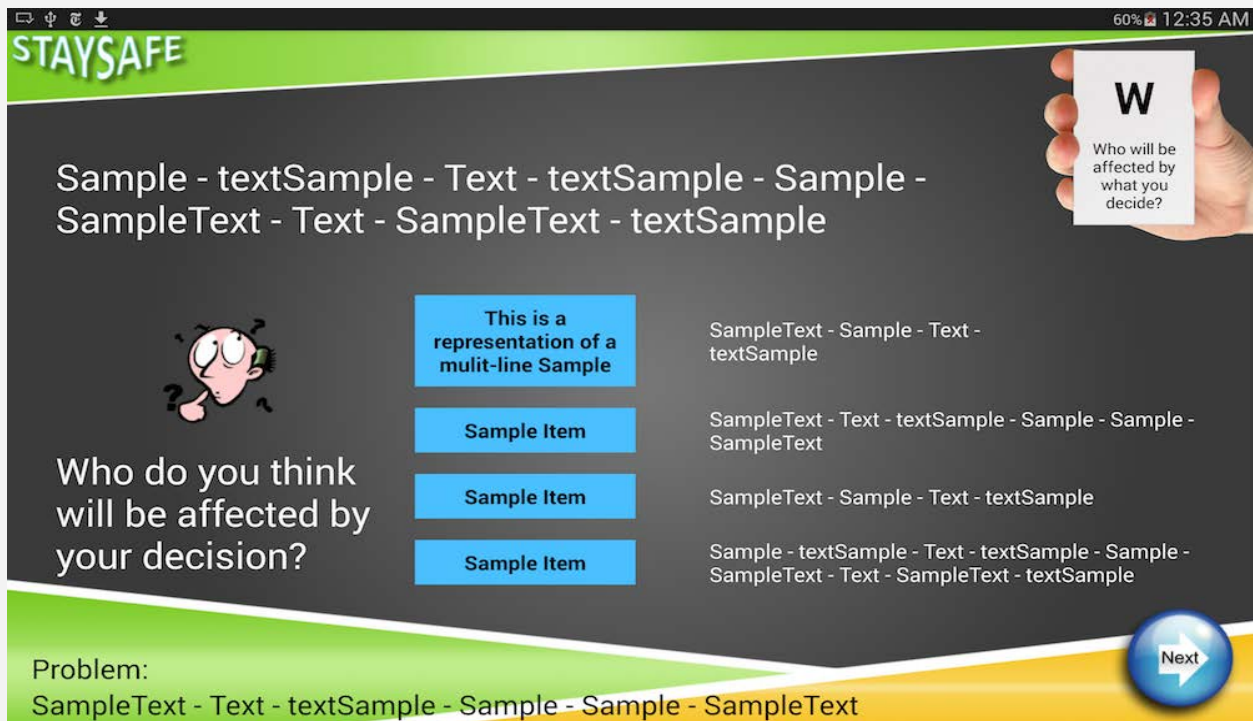
Screen 6: Re-state problem

Input	Problem choice from screen 2.
Animated Hand	W What's the problem?
Voiceover	Voiceover that explains the problem in greater detail. Will be unique to each problem choice.
Next Button	Completion of narration.
Saved Items	N/A
User-driven error prompts	If the user tries to move on to the next Screen without having listened to the deeper explanation in completion.
Notes	The problem choice will appear on this screen again.



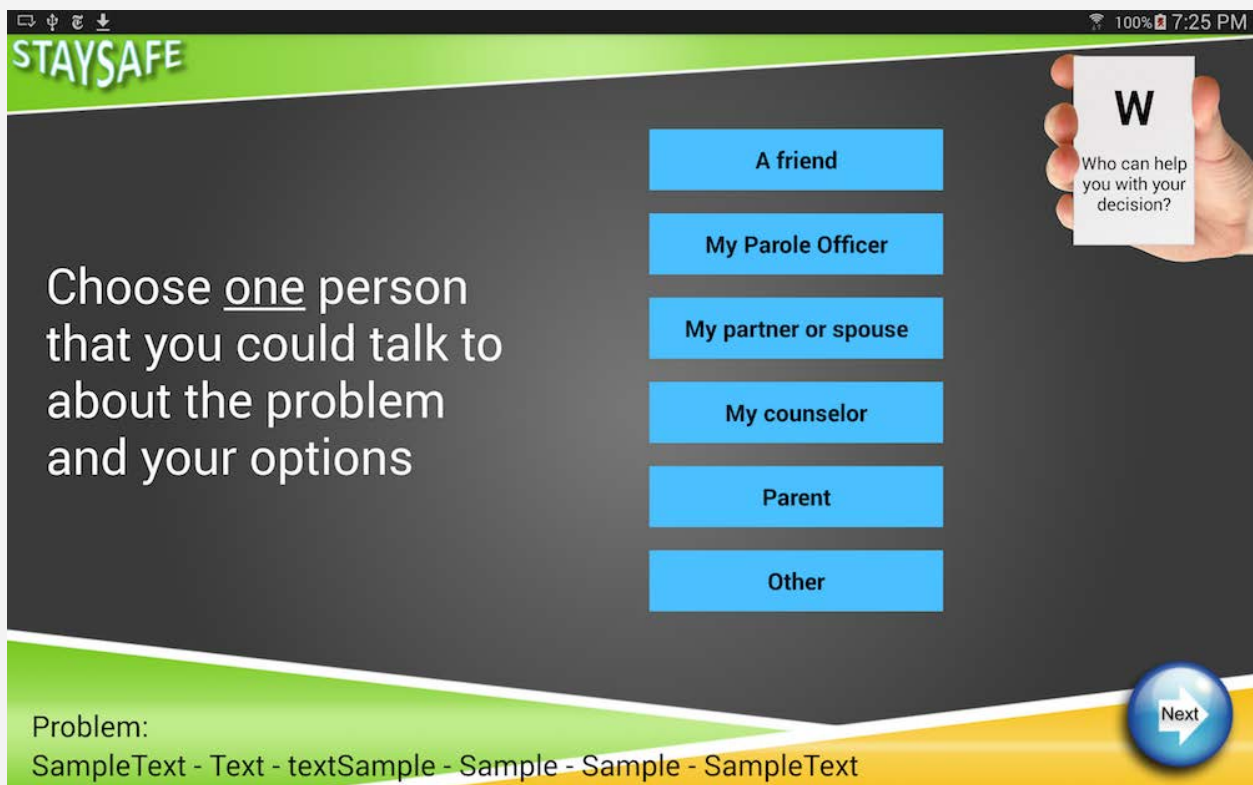
Screen 7: Who's affected

Input	Problem choice from screen two.
Animated Hand	W Who will be affected by what you decide?
Voiceover	<i>"Who will be affected by what you decide?"</i>
Next Button	Selection of one choice from the items displayed on the screen
Saved Items	User selection of who is affected most.
User-driven error prompts	If user does not have one item selected and tries to proceed to the next Screen.
Notes	When a user makes a selection a factoid about their selections should be presented. The problem choice will appear on this screen again.
Factoids	<i>A factoid will only be displayed when the user has selected an option. If the user switches their option then the new factoid will be displayed and the initial factoid will no longer be visible.</i>
Factoid and Affected person limitations	<i>Maximum for the system is ten. Maximum for display to the user is five.</i>



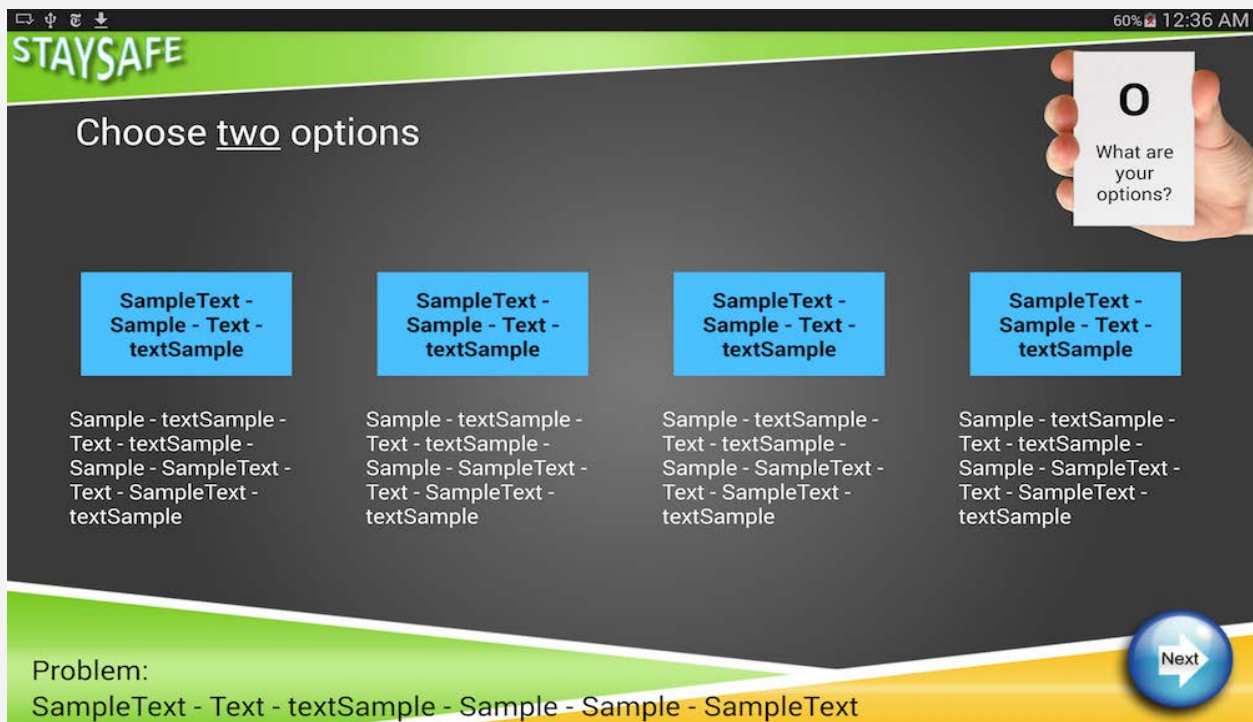
Screen 8: Who can help?

Input	Problem choice from screen two.
Animated Hand	W Who can help you with your decision?
Voiceover	Voice over explaining the benefits of using a confidant as a sounding board. Followed by: <i>“Choose someone you could talk to about the problem and your options.”</i>
Next Button	Selection of one choice from the items displayed on the screen.
Saved Items	The selected person chosen that can help the user solve the problem.
User-driven error prompts	If user does not have one item selected and tries to proceed to the next Screen.
Notes	The problem choice will appear on this screen again.



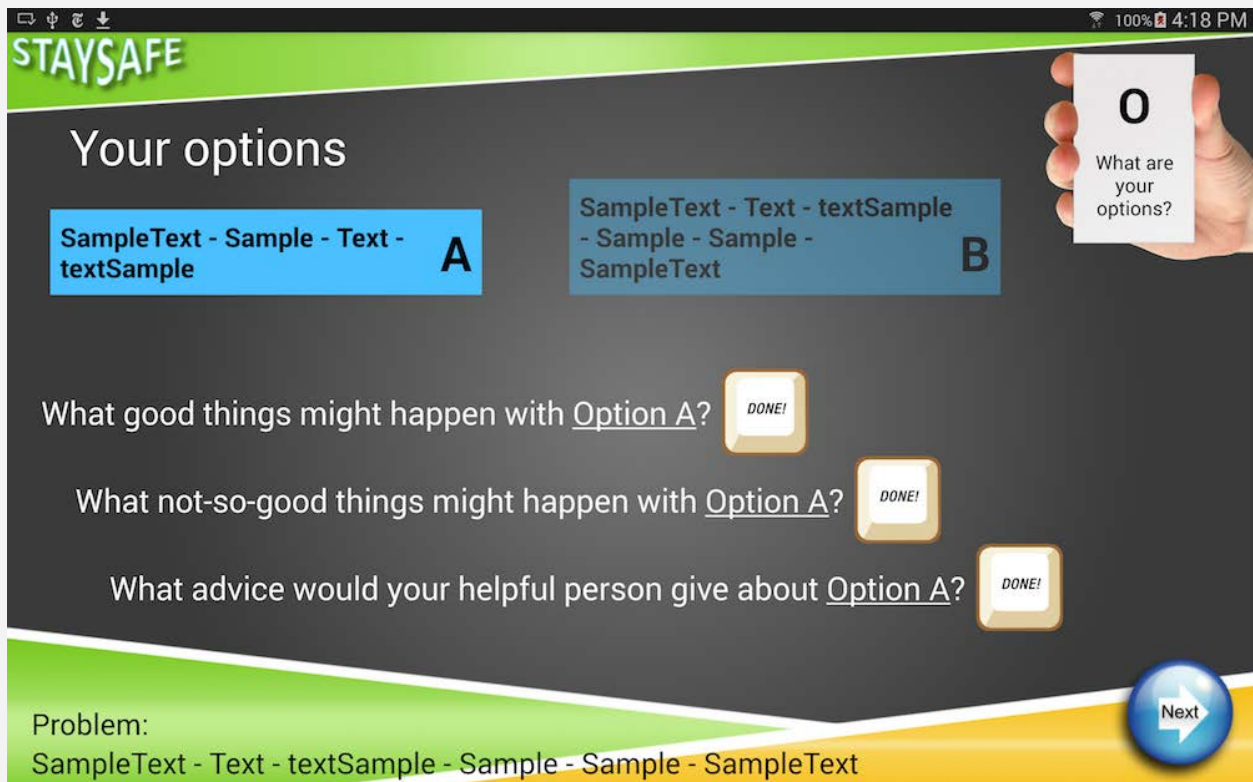
Screen 9: Options

Input	Problem choice from screen two.
Animated Hand	O What are your options?
Voiceover	<i>"Pick two options."</i>
Next Button	Selection of two choices from the items displayed on the screen.
Saved Items	User selection of two options.
User-driven error prompts	If user does not have two items selected and tries to proceed to the next Screen.
Notes	The problem choice will appear on this screen again.
<i>Options limitations</i>	<i>Character limit for each option is seventy-five characters. Only four options per problem choice.</i>



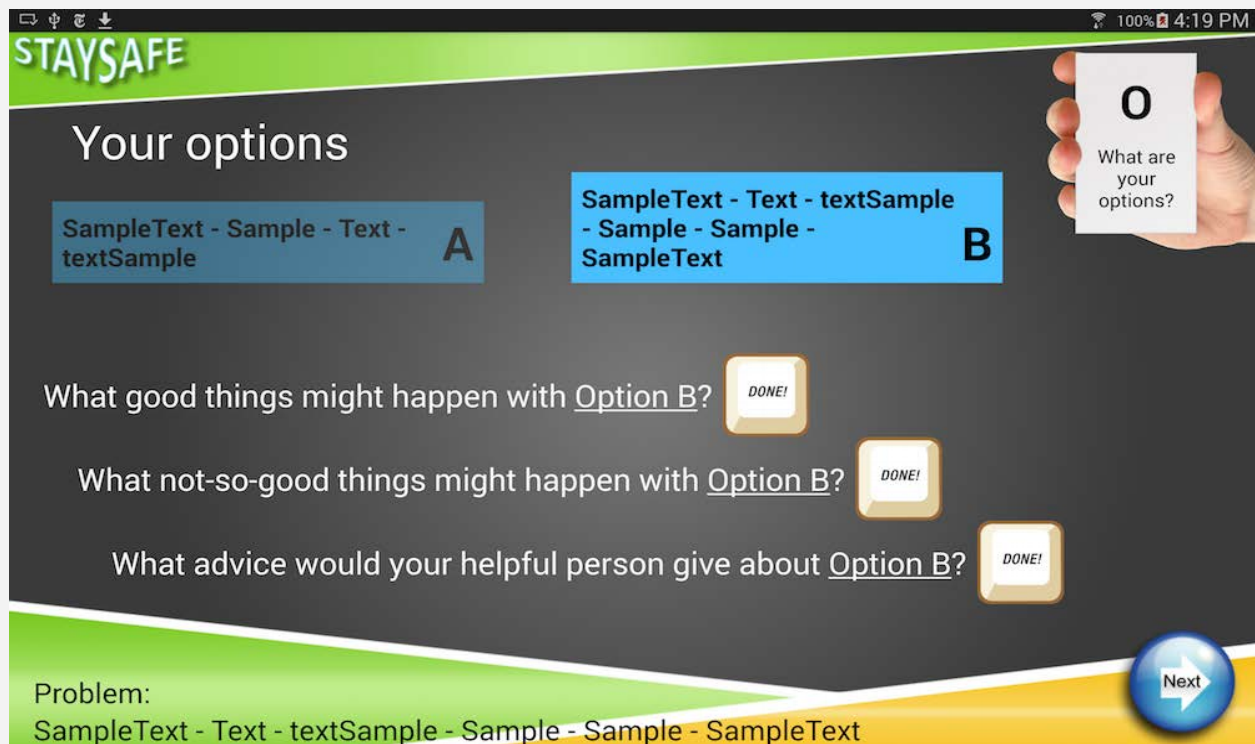
Screen 10: Think about first option

Input	Options from screen nine.
Animated Hand	O What are your options?
Voiceover	Read through questions on screen and tell user to press button when done thinking about questions.
Next Button	All questions have been thought about.
Saved Items	N/A
User-driven error prompts	If the user tries to go to next Screen before the minimum time. If the user is thinking about a particular question to long.
Notes	Both options visible. Option A is highlighted while option B is grayed out. All three questions are fully visible.
Time requirements	<i>Prompts and timers will be needed to ensure user thinks about each question for a minimum of ten seconds and does not think longer than thirty seconds.</i>
Visual requirements	<i>Both options will be presented to the user appearing as equal. (Both appearing the same size)</i>



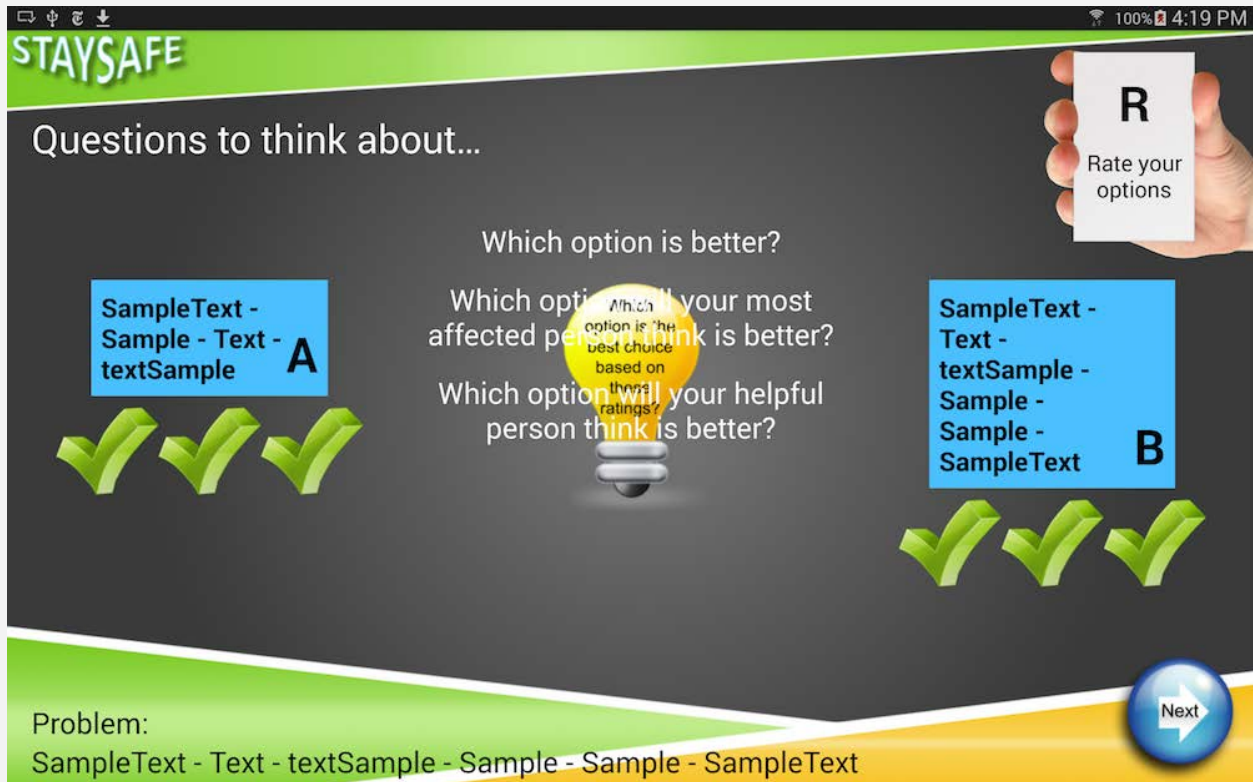
Screen 11: Think about second option

Input	Options from screen nine.
Animated Hand	O What are your options?
Voiceover	Read through questions on screen and tell user to press button when done thinking about questions.
Next Button	All questions have been thought about.
Saved Items	N/A
User-driven error prompts	If the user tries to go to next screen before the minimum time. If the user is thinking about a particular question to long.
Notes	Both options visible. Option B is highlighted while option A is grayed out. All three questions are fully visible.
Time requirements	<i>Prompts and timers will be needed to ensure user thinks about each question for 10 seconds and does not think longer than 30 seconds. Timers should not start until the voiceover has finished.</i>
Visual requirements	<i>Both options will be presented to the user appearing as equal. (Both appearing the same size)</i>



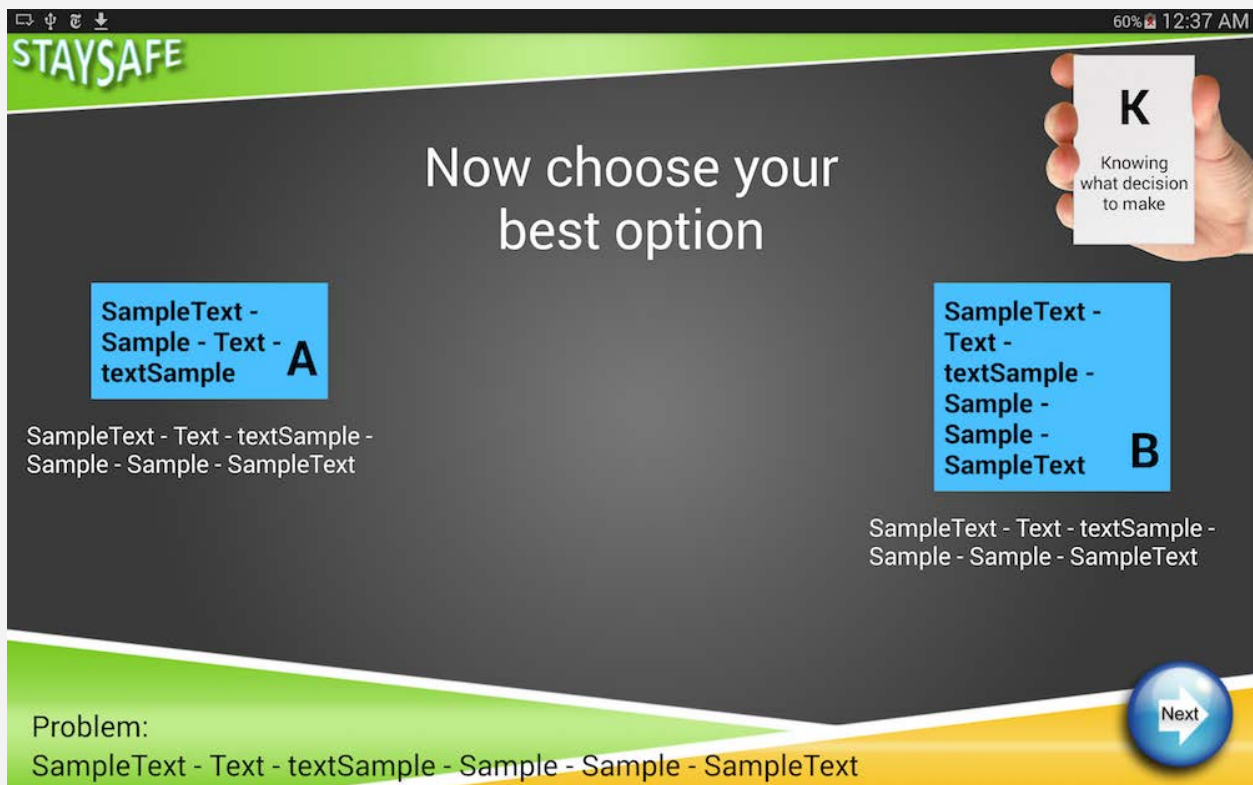
Screen 12: Rate options

Input	Options from screen nine.
Animated Hand	R Rate your options
Voiceover	?
Next Button	The three questions will have been dragged to either of the two options.
Saved Items	The answers to all three questions on screen.
User-driven error prompts	If the user tries to go to next screen before rating all three choices.
Notes	These questions are used for every session. Some form of indication will need to indicate what has been chosen.



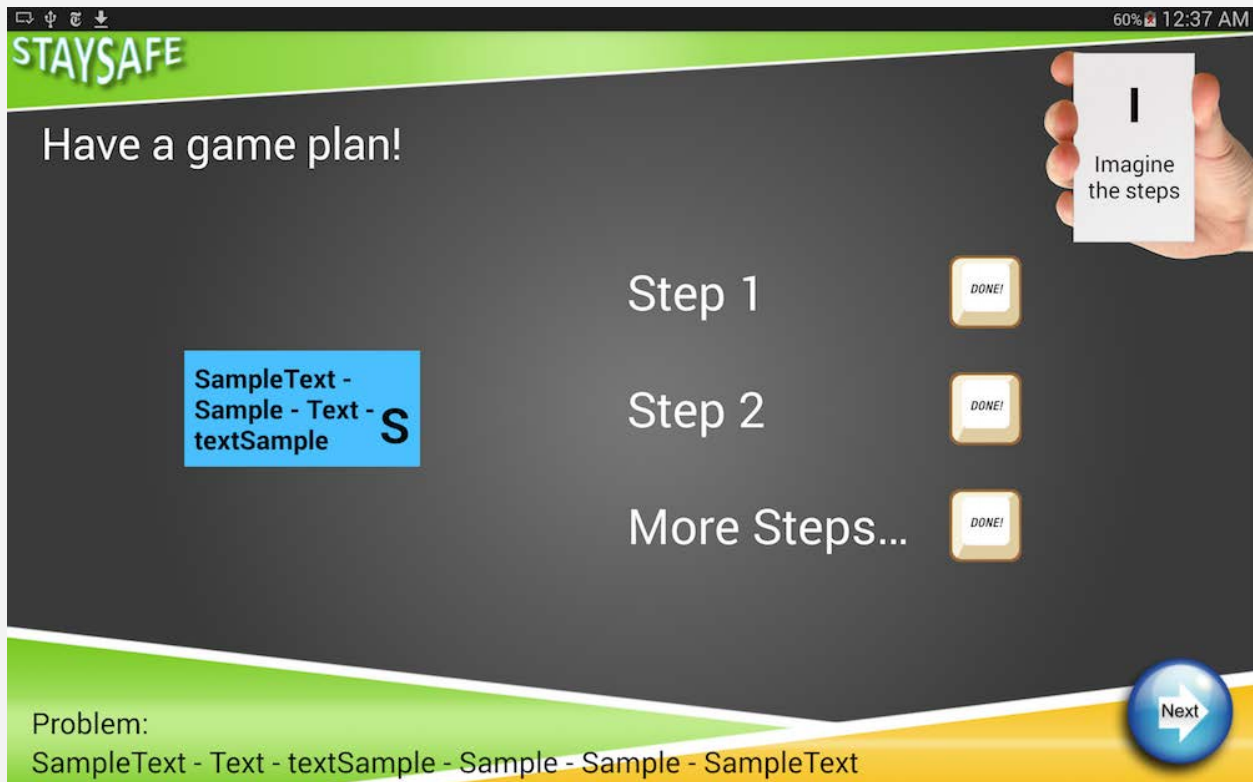
Screen 13: Choose best option

Input	Problem choice from Screen two. Options from Screen nine.
Animated Hand	K Knowing what decision to make.
Voiceover	<i>"Before you choose, think about the two options and what you think that your person most affected and your helpful person would say to you about your options."</i>
Next Button dependencies	A single option has been chosen.
Saved Items	The user selected option.
User-driven error prompts	If the user tries to go to next screen before choosing their best option.
Notes	The problem choice will appear on this screen again.
<i>Selecting a choice</i>	<i>The option the user chooses should be circled when pressed.</i>



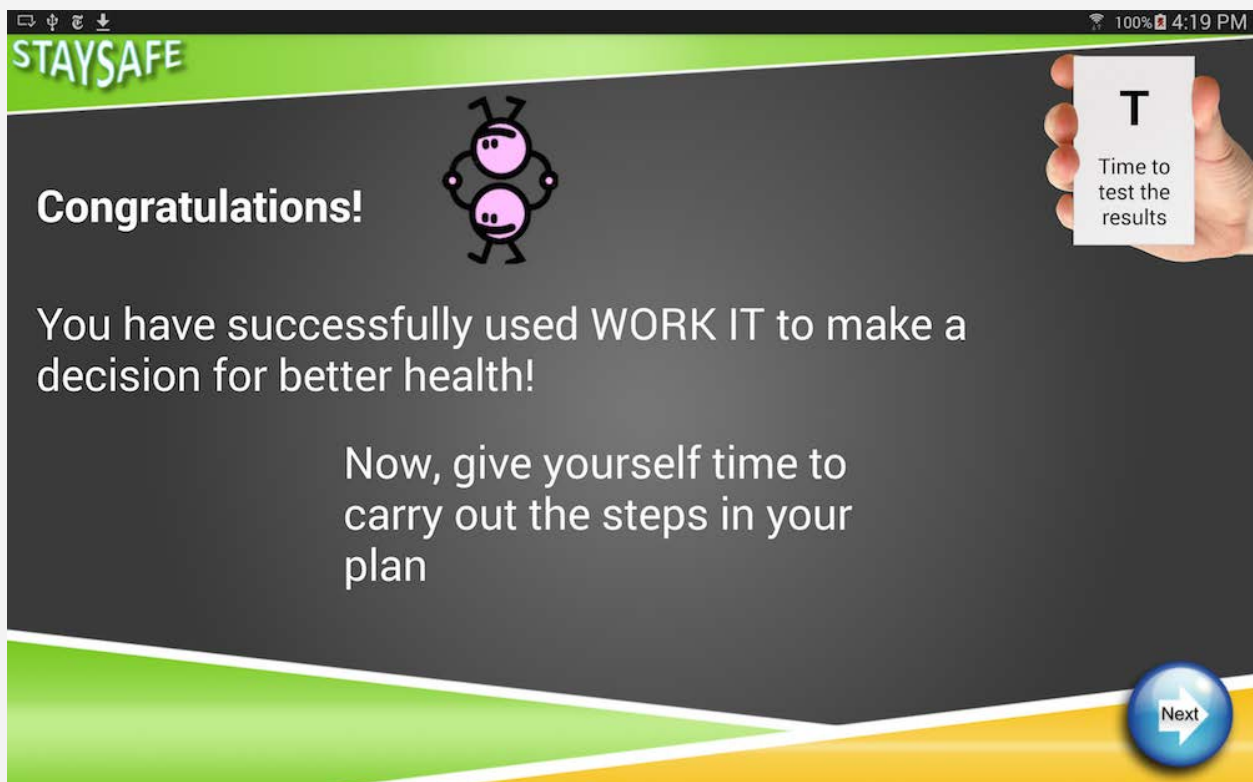
Screen 14: Steps to take

Input	Problem choice from screen two. Best option from screen thirteen.
Animated Hand	I Imagine the steps.
Voiceover	<i>“It will be helpful to think about or “imagine” what steps you need to take in order to make your choice happen. Think of this as having a game plan! Imagine what the first step in your game plan should be....”</i>
Next Button	The first two steps have been thought through.
Saved Items	N/A
User-driven error prompts	If user tries to go to next screen before thinking about the steps needing to be taken.
Notes	The first two steps are required to proceed. The “More steps...” option is not required but the option is available. The problem choice will appear on this screen.
Time requirements	<i>Prompts and timers will be needed to ensure user thinks about each question for a minimum of ten seconds and does not think longer than thirty seconds. Timers should not start until the voiceover has finished.</i>



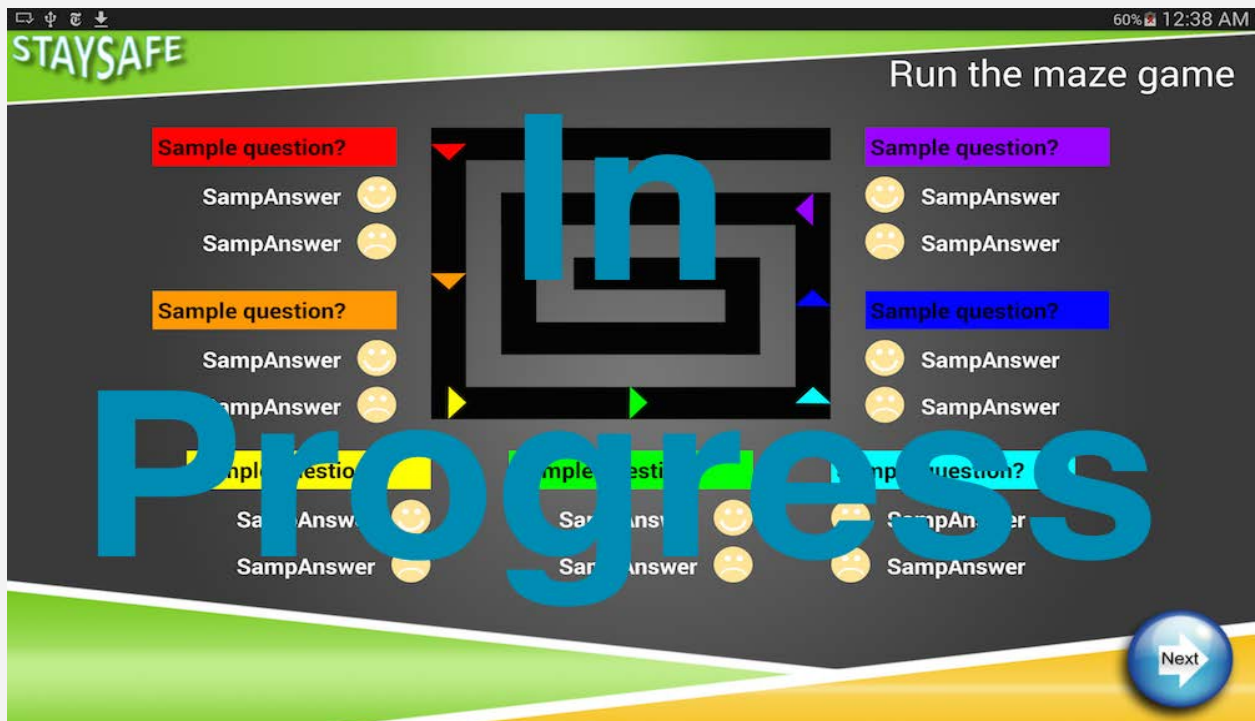
Screen 15: WORK-IT Finished

Input	N/A
Animated Hand	T Time to test for results.
Voiceover	“Congratulations! You have successfully used WORK-IT to make a decision for better health! Now, give yourself time to carry out the steps in your plan.”
Next Button dependencies	Voiceover to finish.
Saved Items	N/A
User-driven error prompts	User tries to go to the next Screen before the voiceover has finished.
Notes	Animation congratulating the finishing of the WORK-IT process.



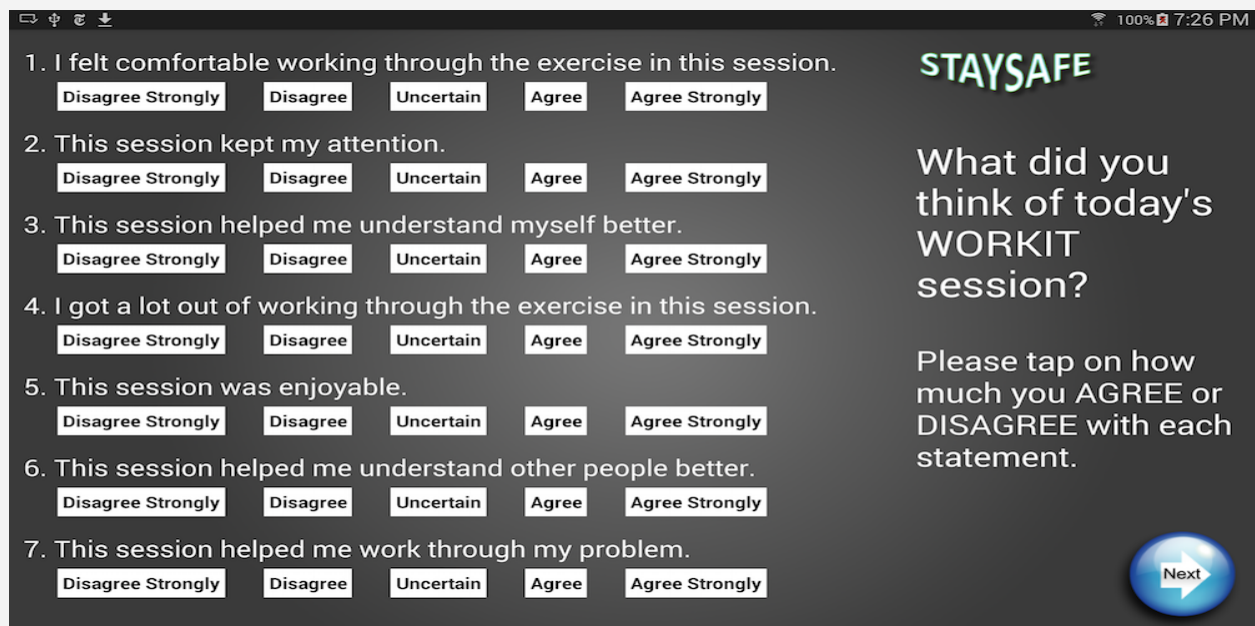
Screen 16: Game

Input	N/A
Animated Hand	N/A
Voiceover	"Select the best answer."
Next Button	N/A
Saved Items	The answer the user chose.
User-driven error prompts	N/A
Notes	Rapid succession of two choices.
Questions	Each question has only two possible answers shown. There will only be six questions per game.
Answers	If user chose correct answer - affirm it. If the incorrect answer was chosen - "unhappy audio" and highlight the correct answer.
Correct tally	For every correct option, a mark should be added to a correct tally below the questions. This will give the user a feel for how many questions are left in the game and how many they have gotten correct. Only correct marks will appear in the tally; no incorrect marks.



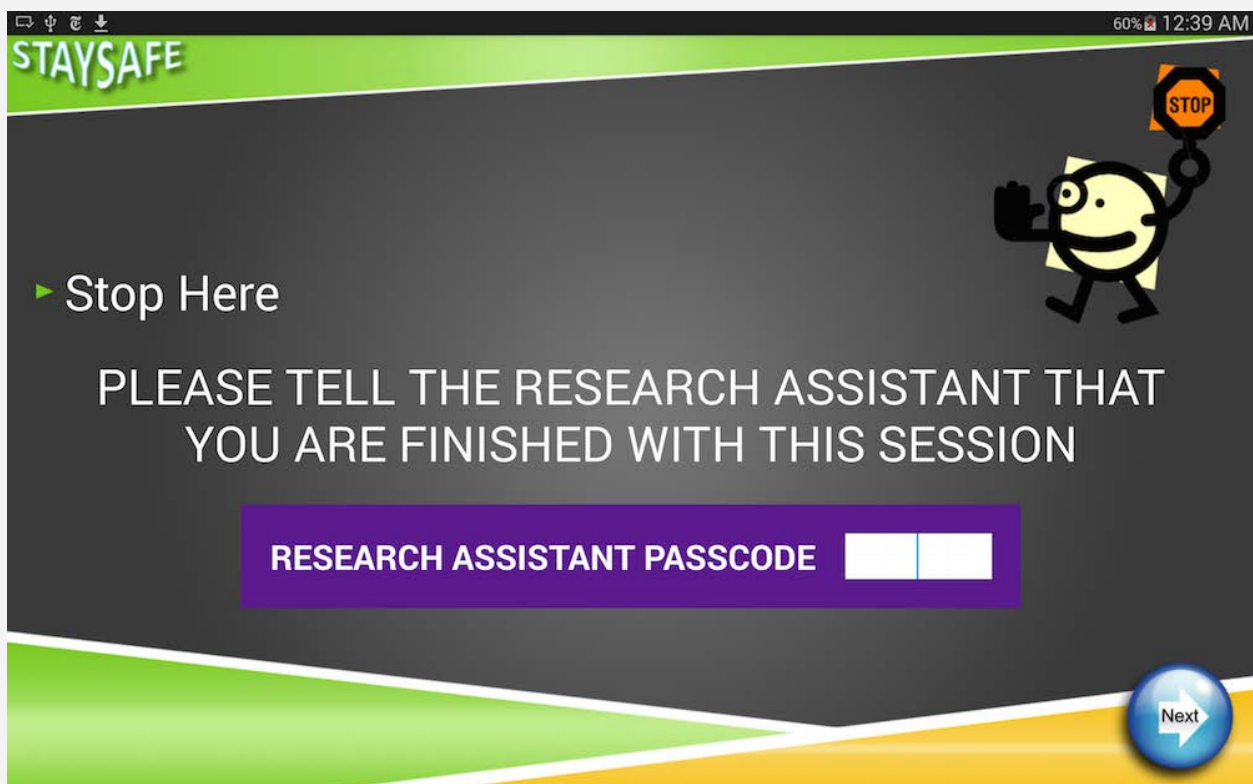
Screen 17: Survey

Input	N/A
Animated Hand	N/A
Voiceover	NA
Next Button	Completion of the user satisfaction survey.
Saved Items	Users rating of each survey item
User-driven error prompts	N/A
Notes	Same for all problem choices. Seven questions.
Ratings	<i>The ratings will appear in a box next to the questions. Within this box the five options will appear and the user will make a selection by tapping on their chosen response. "Disagree Strongly" and "Disagree" will have red text. "Uncertain" will appear in yellow text. "Agree" and "Agree Strongly" will appear in green text.</i>
Structure within Screen	<i>Each question will only be presented one at a time. Once the user has rated an item, the next item will appear while the previous disappears. The questions will appear down the screen so the user knows that they are getting closer to finishing.</i>



Screen 18: Finished

Input	N/A
Animated Hand	N/A
Voiceover	<i>"Thank you! Please tell the research assistant that you are finished."</i>
Next Button	N/A
Saved Items	N/A
User-driven error prompts	N/A
Notes	Needs some sort of password that only the RA will know and therefore only the RA can end the application.



Screen 19: RA Utility

Input	N/A
Animated Hand	N/A
Voiceover	N/A
Next Button dependencies	N/A
Saved Items	N/A
User-driven error prompts	N/A
Notes	Some kind of instruction set to aid the RA in getting the data off the tablet.