P.I.E.L. Survey Application Manual



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Glenda Jessup Steve Bian Yu-Wei Chen Anita Bundy

### Contents

Dverview	4
Chapter 1: Developing the Control File	.5
1.1. Control File	.5
1.1.1. Sample Control File	. 5
1.2. The P.I.E.L Survey App Home Screen	. 7
1.3. Control File Lines	. 7
1.3.1. Name, author and version fields	. 7
1.3.2. Author-email	.8
1.3.3. Subject-id	.8
1.3.4. Max-duration	.8
1.3.5. Max-delay	.8
1.3.6. Run lines: Fixed and random sampling	.8
1.3.7. Run-for/ Number of days1	10
1.3.8. Can-run-once/ Event contingent mode1	10
1.3.9. Can-test/Allowing testing1	10
1.3.10. Exit and placeholder messages1	10
1.3.11. Survey alert sounds	1
1.3.12. Comment lines	2
1.3.13. Deleting control file lines	2
1.4. Question Response Types	12
1.4.1. Buttons1	13
1.4.2. Checkbox1	4
1.4.3. List	٤4

	1.4.4. Slider	14
	1.4.5. Text	15
	1.4.6. Branching questions with %NEXT and %NEXT END	16
	1.5. Saving the Control File	16
	1.6. Installing the Control File	17
	1.7. Testing the Control File	18
	1.8. Starting and Answering Surveys	19
	1.8.1. A survey run sequence	19
	1.8.2. The question sequence	20
	1.9. Stopping a Survey Mid-project	20
Ch	apter 2: Device Preparation	21
2	2.1. Notifications and Alert Style	21
2	2.2. Restricting Functions	21
2	2.3. Screen Orientation	21
2	2.4. Volume Settings	22
2	2.5. Charge the device	22
2	2.6. Participant device preparation	22
Ch	apter 3: Exporting Results	23
Ch	apter 4: Utilising Vision Accessibility features	24
4	4.1. Using Voiceover	24
4	4.2. Using Zoom Functions	25

# Overview

The P.I.E.L. Survey App is designed to gather data from people in their daily lives, hence the acronym, P.I.E.L. (Participation in Everyday Life). It was developed as a tool for the Experience Sampling Method (ESM) by researchers at the Faculty of Health Sciences at the University of Sydney with the assistance of Vision Australia. The App icon reflects the original ESM tools of pencil/pen and paper.

The focus and priority of the App is on inclusive research. It has been designed to utilise the accessibility features of iDevices. It allows a researcher to create a survey and either install it directly into the App on an iDevice or email it to a participant to install into the App previously downloaded onto their own iDevice.

Essentially, an alert notifies a participant that a survey is due. They respond and the survey opens. The App presents a set of questions and records and timestamps their responses. When the participant finishes the survey, the App sleeps until the next scheduled survey is due. The same question set is used for each survey run within a project.

This manual explains how to develop a survey control file and install it in the P.I.E.L. Survey App.

# **Chapter 1: Developing the Control File**

# 1.1. Control File

A control file prescribes the content and scheduling of a survey and must be created as a .survey document using Notepad. In it are lines which:

- 1. Identify the survey and specify how it is scheduled
- 2. Specify alert sounds and contain any exit and placeholder messages.
- 3. Contain the questions.
- 4. Contain any comments.

#### 1.1.1. Sample Control File

The following sample control file shows the lines that are necessary to compile a control file to load into the P.I.E.L. Survey App. Some lines are essential, others are optional. Optional lines are marked with an asterisk (\*) in this control file for demonstration purposes only. The \* has a unique function in an actual control file. It is used when scheduling survey runs to mean "on all days" (section 1.3.6.).

A vertical bar "|" (usually located above the enter key) is used in the control file to separate its different components. Do not use "|" at the beginning or end of a line. You do not need any spaces before or after this separator.

Use this sample as an easy way to develop your own control file. Copy it into Notepad, remove the asterisks from the beginning of the lines and modify it to suit your needs. Section 1.3 further explains the function of each of the lines.

\*name|Sample Survey \*author|Steve author-email|stevie@biglake.com \*version|2.0 subject-id|1960 max-duration|600 max-delay|180 run|7|1915,1920,1925 run|1|0900-1200,1500,1700-1900 run|2,3,4|1300-1600 run-for|7 can-run-once|1 can-test|1 \*exit-message|3|Thank you for your participation \*placeholder-message|Nothing for now, thank you for checking! \*alert-sound|001 \*#this is a comment line which will be ignored. \*#Below are the guestions. Integers indicate the guestion number 1|Where are you now?|Inside|Outside|Other 2|What is the main thing you were doing?|Nothing|Watching others|Reading/writing/drawing|Internet Surfing|Chat in person/ phone/ computer|Phone/computer game(s)|Running/ ball game(s)|Other 3|Who were you with mainly?|No one %NEXT 6|Friend(s)|Student(s)| know|Student(s)| don't know|Adult(s) 4|Was he/she (Were they) doing something to make it fun?|Yes|No 5|Were you doing something to help him/her/them have fun?|Yes|No

6|Whose idea was it?|Mine|People I am with|Teacher(s)or aide(s)|Other

7|Why were you doing it?|Because I like it.|Because I really value doing it.|Because I want people to like me.|Because I feel I have to do it.|So I won't get in trouble|I don't know.

8|Were you happy? %TYPE slider|Not at all|Very much

9|Were you enjoying yourself? %TYPE slider|Not at all|Very much

10|Do you wish you are with someone else?|Yes|No %NEXT 12

11|Who do you wish you are with? %TYPE checkbox|No one|Friend(s)|Adult(s)|Others

12|Do you wish you are doing something else?|Yes|No %NEXT END

13|Please specify %TYPE text

# 1.2. The P.I.E.L Survey App Home Screen

Below is an image of the P.I.E.L Survey App home screen. It has 3 buttons (Test Survey, Run Survey Once and Start Survey) at the top. These will be explained further on in the manual. The name allocated by the name field (not the .survey filename), is displayed in the body of the home screen. Multiple surveys can be loaded into the App but only one of these can be active at any time.



# 1.3. Control File Lines

This section explains each of the lines in the sample control file. Many of these fields are case-sensitive. Keep them in lower case.

#### 1.3.1. Name, author and version fields

These lines are optional. The name field (as distinct from the .survey filename) is the name that will be displayed on the P.I.E.L Survey App home screen. If a name is not specified in this field, surveys will be identified by their filename in the App.

name|Sample Survey author|Steve version|2.0

#### 1.3.2. Author-email

The author-email field is the address to which a survey project will be emailed at its completion.

E.g., author-email|stevie@biglake.com

#### 1.3.3. Subject-id

This line allows the allocation of a unique identifier to each participant's survey and is recorded as a field in the output file. You must have subject-id if you intend to email a control file to participants (<u>section 1.6.</u>).

E.g., subject-id|1960

#### 1.3.4. Max-duration

This line specifies how long the participant has to complete the survey run once they have opened it before it times out. It is marked in seconds and often set at 600 (10 minutes).

E.g.,max-duration|600

If you don't want the survey run to time out, set max-duration at 9999.

#### 1.3.5. Max-delay

This line specifies the duration of the delay between the beginning of the alert sound and when the survey is marked as expired because, in that particular survey run, it has been unopened. It is in seconds and often set at 180 (3 minutes). E.g., max-delay|180

#### 1.3.6. Run lines: Fixed and random sampling

This line (often lines) specifies explicitly on which days of the week and at what times the surveys should run. There may be multiple run lines per survey, allowing each day of week to be configured differently. Surveys can be set to run at fixed or random times during a set time interval or can be set to use a combination of both fixed and random sampling. The general format of a survey schedule line is: run|days of the week (specified by number)|time specification, time specification.

The week starts on Monday, specified as 1. Sunday is specified as 7. An asterisk (\*) is used to denote "on all days", indicating that the survey should be identically scheduled on all 7 days of the week. Use a 24 hour clock (no punctuation e.g. 1230, not 12:30). E.g., to run a survey every day at 3:11pm (1511) run|\*|1511

**Fixed Sampling**: Specify which days and times of the week a survey should be run. If the same schedule is used on multiple days, separate the days with a comma. E.g., run on Sunday at 7:15pm, 7:20pm and 7:25pm and on Monday and Tuesday at 7pm, 7:30pm and 8pm. run|7|1915,1920,1925 run|1,2|1900,1930,2000

**Random Sampling:** If multiple random alarms are desired within some time period, it is best to break up the time period into shorter chunks and schedule an alert for each of these shorter periods. This saves alerts falling on top of each other or running into each other. E.g., schedule 3 random runs on Monday between 9am and 2pm run|1|0900-1000,1100-1200,1300-1400

This example ensures the minimum time between runs is one hour. Some researchers only allocate 5 or 10 minutes between chunks of time.

**Combined Fixed and Random Sampling:** The following lines from the sample survey indicate both fixed and random sampling. run|7|1915,1920,1925 (fixed) run|1|0900-1200,1500,1700-1900 (fixed & random) run|2,3,4|1300-1600 (random only)

#### 1.3.7. Run-for/ Number of days

This line specifies how many days the surveys run, starting from the date the survey starts. E.g., run for 7 days starting from the day the survey starts run-for|7

There is effectively no limit to the number of days a survey can be programmed to run.

#### 1.3.8. Can-run-once/ Event contingent mode

This feature is sometimes called event contingent sampling. Enabling this allows participants to initiate the survey run. It also allows the same survey to be run multiple times during a particular time period so, for example, numerous people can give feedback about a particular product or event. At the beginning of each can-run-once survey, a screen will appear asking for a subject ID. Enabling can-run-once will make the "Run Once" button visible on the top right hand corner of the survey home screen. can-run-once|0 (can-run-once disabled) can-run-once |1 (can-run-once enabled)

#### 1.3.9. Can-test/Allowing testing

(See also <u>section 1.7</u>). Enabling this feature will allow testing of some features such as the alert sounds, max-delay, exit messages and survey questions after the control file is installed into the App. Responses are not recorded in test mode. Can-test is useful for testing how well the questions and responses fit the screen visually. It is also useful to demonstrate the survey to participants before they do it in situ.

- can-test|1 (allows the survey to be tested)
- can-test|0 (does not allow testing)

#### 1.3.10. Exit and placeholder messages

These are optional lines in the survey.

**Exit Message:** This line specifies the text displayed on the screen following the last question (see following image). Its length is specified in seconds.

E.g., exit-message|3|That's all folks!



Multiple exit messages can be scheduled to cycle sequentially throughout the duration of a project. There will be one exit message per survey run but this will vary sequentially. Specify each message and its duration on a new exit-message line. E.g. exit-message|3|That's all folks! exit-message|3|Thank you for your participation exit-message|3|So long farewell!

**Placeholder message:** This line specifies the message that appears on the screen if participants peek at the App in between survey runs (see following image). It also appears when a survey is first started before the App goes to sleep.

E.g., placeholder-message|You are such a wonderful person. So much so, why don't you sit back and relax for now?



#### 1.3.11. Survey alert sounds

There is a small library of alert sounds that can be used with the P.I.E.L. Survey App. When choosing a sound, remember that the speakers on the iPad are larger than on an iPod Touch. Sounds that are a good volume on an iPad may be too soft on smaller devices. For example, sound 008 (cat) is more suited to an iPad than an iPod or iPhone. These alert sounds will be independent of any settings the user may have on their own device. If no sound is specified (i.e., alert-sound line is omitted), the default sound will be the system alert.

```
alert-sound|001 = djembe-loop
                                (approx 2 secs)
alert-sound|002 = futureretrocomputing
                                        (approx 12 secs)
alert-sound|003 = oooooh
                           (approx 2 secs)
alert-sound|004 = tada
                        (approx 10 secs)
alert-sound|005 = robot
                         (approx 12 secs)
alert-sound|006 = yiddishsynthesiser
                                       (approx 11 secs)
alert-sound|007 = dolphin
                           (approx 11 secs)
alert-sound|008 = cat meowing
                                (approx 10 secs)
```

Specify the alert sound via: alert-sound|x where x is the number of the sound in the library. E.g., to specify alert-sound 5 (robot) alert-sound|005

#### 1.3.12. Comment lines

You can put comment lines in a control file by inserting # in front of each line. # stops these lines from being read as a command.

#### 1.3.13. Deleting control file lines

Delete a control file line by simply removing it or alternately by inserting # in front it. This second option is useful if there are lines that might be needed later. Rather than repeatedly deleting and reinserting lines, simply add or remove # at the front of the line.

# 1.4. Question Response Types

This section explains the different response types. However there are features that all questions need to have. These are:

1. A unique question ID. This is an integer followed by the separator "|" to separate it from the question text. Start integers at 1. Question IDs are stored with participants' responses and also determine the order questions are presented. Questions are asked

in ascending order.

2. The question text followed by a %TYPE question description. If there is no %TYPE description, the question will be regarded by default as buttons and allocated one button per response.

3. Allocated text for responses (with the exception of free text questions). There is technically no limit to the number of response options you can have per question, however an iPad can display a maximum of 10 buttons per question at one time. An iPod Touch or iPhone will scroll any more than 4 response options. The question response types can be:

- Buttons
- Checkbox
- List
- Slider
- Text

There is also a provision for branching questions.

The vertical bar "|" separates the different components of the control file fields, questions and responses. Do not use "|" at the beginning or end of a control file line or in the question text. You do not need any spaces before or after this separator.

Also do not use the symbol "%" followed immediately by a letter in the question text.

#### 1.4.1. Buttons

This is the default setting when no %TYPE is specified. Buttons are presented as boxes on the screen (see the image below). Each response is allocated one button.

The iPad screen can display a greater number of buttons than the iPod Touch. The iPad can display up to 10 buttons at once. Only 4 buttons can be displayed at once on the smaller devices (the following image shows a display of 4 buttons on an iPod Touch) and the display for more than 4 responses on these devices will then be similar to that of a list question. Participants will have to scroll through a list of responses rather



than see all response options on the screen at once.

#### 1.4.2. Checkbox

A checkbox allows for multiple responses to the one question. E.g.,

11|Who do you wish you were with? %TYPE checkbox|No-one|Friend(s)|Adult(s)|Others

When participants select their responses in a %TYPE checkbox question, they need to also tap the "Next" button at the bottom right of the question screen to advance to the next question.

#### 1.4.3. List

This displays a list containing all responses. Responses are scrolled horizontally on the screen.

E.g., 37|How are you feeling today? %TYPE list|wonderful|good|OK|bad|lousy

#### 1.4.4. Slider

A slider (see following image) goes from a minimum to a maximum value. The output scale is from 0 to 1, with 0 allocated to the left pole. Its default position is at the 0. The researcher specifies the text at the poles.

E.g., 8|How interested were you? %TYPE slider|Not at all|Very much



The slider requires only a light fingertip touch on the nub to move. When participants have indicated their response, they need to tap the "Next" button at the bottom right of the question screen to advance to the next question.

#### 1.4.5. Text

To create a text box (see following image), use %TYPE text.

E.g. 13|Please specify? %TYPE text



Tapping on the "type answer here" box will activate the keyboard. When participants finish typing their response, they must tap "Done" on the top right corner of this keyboard and it will disappear. They then need to tap the "Next" button at the bottom right of the question screen to advance to the next question.

#### 1.4.6. Branching questions with %NEXT and %NEXT END

During a survey, questions are presented by default in ascending integer order. However, if a participant chooses a particular response option, the questions immediately following may not be relevant to them. Questions can be branched so participants are directed to a designated question or to the end of the survey. To direct them to a designated question, put %NEXT and the required question number after the response. E.g.,

3|Who were you with mainly?|No one %NEXT 6|Friend(s)|Other student(s) I know|Other student(s) I don't know|Adult(s)

If a respondent selects "No one", they are presented next with Q6 rather than the question immediately following (Q4).

%NEXT END specifies that the participant skips the rest of the survey and is taken to the end screen or exit message.

#### 1.5. Saving the Control File

The control file needs to be in .survey format to be installed into the App. Save the file created in Notepad by creating a .survey extension in the filename box. This extension name is case sensitive and must be lower case. In the "Save as type" box, select "All Files". In the Encoding box, select "UTF-8" (see following image).



# 1.6. Installing the Control File

Once the control file has been saved as a .survey file it can be installed into the P.I.E.L. Survey App. There are two ways of doing this. One is via iTunes; the other is via email or web link. The iTunes option allows researchers to load a survey onto their own device to play with beforehand. The second option allows participants to load a survey onto their own iDevices once they have installed the P.I.E.L. Survey App.

#### Installing via iTunes file sharing

- 1. Plug the device into the computer. ITunes will open.
- 2. Click on the Apps tab. Scroll down to file sharing.
- 3. Click on the P.I.E.L Survey App and a window will appear at the right which lists all the files currently loaded on the P.I.E.L. Survey App. Down the bottom of this window is a button that says "add". Click on it and navigate to your .survey file.
- 4. Double click and it will appear in the App window. An alternate way to transfer a file is to directly drag it from the document folder to the App window.
- 5. Disconnect device.

#### Installing via email or web link

**Installing via email:** The participant must open the email on his or her iDevice and taps on the attachment. iOS will offer it in P.I.E.L. Survey. The following images show this sequence.



**Installing via web link\*:** The participant is sent an email in which there is a link pointing to the survey control file. Safari will offer to open it in P.I.E.L Survey.

\*Tech note: If the survey control file is to be opened via Safari, it must be served with a mime type of application/piel-survey. See

http://en.wikipedia.org/wiki/Internet\_media\_type for more details.

Surveys that are installed via email or web link start from the day the "Start" button on the home screen is activated (see <u>section 1.8.</u>) if it is possible to have a full day of surveys scheduled. Otherwise they start the next day. You must have a subject-id line (<u>section 1.3.3</u>) to install surveys via email or web link.

#### 1.7. Testing the Control File

Only once you have installed your control file with your survey questions, can you test it. **However**, you must have enabled this feature in the development phase (<u>section</u> 1.3.9.) by enabling the can-test function (i.e. can-test|1). A "Test Survey" button is then visible on the top left corner of the home screen (<u>section 1.2</u>). When you activate the "Test Survey" button on the home screen, you are presented with two options. One is to test the survey immediately; the other is to test it in 5 seconds. An immediate test option runs the alert sound and opens the questions straight away. No notification message appears on the screen. The second option, testing after 5 seconds, will give an alert sound as well as an on-screen notification message.

The test-survey option is useful for testing how well the questions and responses visually fit the screen and as a way to demonstrate the survey to participants before they have to do it for real.

During a survey test run, a fast forward icon appears at the bottom of the screen that allows you to skip all the questions and go to the end of the survey. This is useful for testing alert sounds without having to run through all the question screens.

If you want to test a survey and record results, enable and use the "can-runonce" function. This however will not provide an alert sound or notification.

# 1.8. Starting and Answering Surveys

**Starting a survey as a researcher:** To start a survey from the P.I.E.L Survey home screen, activate the "Start" button on the top right of the home screen. An alert notice will appear confirming the participant's ID (if not specified in the control file) and the start day of the survey. Confirm this and the survey will start. A placeholder message will immediately appear (if specified) and the App will then go to sleep.

**Starting a survey as a Participant:** There are two steps to this process. The first step is to tap "OK" on the "Survey Imported" alert (see image <u>section 1.6</u>) that appears at installation. The second step is to activate the imported survey control file by (1) tapping on this file on the home screen and then (2) tapping the "Start" button on the top right of the home screen. Although activated, the control file will not present any surveys to the participant until it is possible to have them run for a full scheduled day. If this is not possible (i.e the participant has activated the control file in the evening and surveys are scheduled throughout the day) the surveys will start on the next day.

#### 1.8.1. A survey run sequence

The App sleeps until a survey run is due. Then an alert will sound and a notification (a P.I.E.L. App slider) will appear in the middle of the screen. The participant needs to respond to the notification immediately, by dragging the notification slider to the right, and the survey will automatically open. Alternately, slide the unlock button to the right and the survey should also open.

The participant has a limited time (set by max-delay) to respond to the alert notice. If the alert notice disappears from the screen before max-delay time is up and the survey does not open automatically, open it from the notification bar. This is a blind pulled down from the top of the screen (see following image).



If the participant misses the max-delay period, a placeholder message will appear. If the participant fails to finish the survey within the allocated time period set by the researcher (max-duration), a placeholder message will appear and the App will sleep till the next alert.

#### 1.8.2. The question sequence

The survey automatically progresses when button and list (%TYPE list) questions are answered. With multiple response (%TYPE checkbox) and slider questions (%TYPE slider) the participant needs to tap the "Next" button at the bottom right hand corner of the screen to advance to the next question. With a text question, (%TYPE text), the participant needs to indicate they are finished answering by tapping the "Done" button at the top right of the keyboard. When the keyboard disappears they must then tap the "Next" button to advance to the next question.

The "Back" button on the bottom left hand corner of the screen allows participants to go back and change an answer if necessary. They will then have to reanswer successive questions.

Progress through the survey is indicated as a percentage at the bottom centre of the screen (between the "Back" and "Next" buttons). At the end of the survey, an exit message will appear, followed by a placeholder message and the App will go to sleep until the next survey run.

#### 1.9. Stopping a Survey Mid-project

To stop a survey midway through a project go to:

Settings> P.I.E.L Survey > Stop Current Survey. Toggle the switch to "On". If you have passcode restrictions on, you need to enable Delete Apps.

Settings > General > Restrictions. Enter Passcode. Then allow Delete Apps.

# **Chapter 2: Device Preparation**

# 2.1. Notifications and Alert Style

On the device go to: Settings>Notifications.

In the Notification Centre, go to P.I.E.L. Survey and toggle the "Notification Centre" button to "On". In the "Show" section, select "1 recent item". In "Alert Style" select "Alerts" (the right hand option). Alerts require an action before proceeding. The following screenshot shows the required settings.

iPad	12:43 PM	⊕ 33% ID												
Settings	P.I.E.L	Survey												
Airplane Mode OFF	Notification Centre	ON O												
Notifications	Show	1 Recent Item >												
Location Services On	Alert Style													
🙀 Brightness & Wallpaper														
Picture Frame														
General														
Cloud Cloud	None Ba	Alarta												
C Mail, Contacts, Calendars	Alerts require an ac Banners appear at the top of the	tion before proceeding. screen and go away automatically.												
💟 Twitter	Badge App Icon	ON O												
Safari	Sounds													
O Messages	View in Lock Screen													
💋 Music	View in Lock Screen													
Wideo Video														
📌 Photos														
T Notes														

# 2.2. Restricting Functions

Researchers can restrict certain functions on their iDevices by creating a 4 digit security code. Go to: Settings > General> Restrictions

Select the functions you wish to restrict. This limits the alternate uses of the iDevice while participants are doing survey runs. Restricting the deleting apps function prevents the P.I.E.L Survey App from being deleted.

N.B. You need to remove Deleting app restrictions to stop a survey mid-project.

# 2.3. Screen Orientation

The survey is set to run in landscape on the iPad and portrait on an iPod Touch or iPhone.

**iPad:** The survey is set up for landscape. You have the option of using the switch on the side of the device to **either** lock the screen rotation or mute the device. You can't do both. Go to: Settings > General> Side Switch. Then move the side switch button towards the centre.

**iPod Touch or iPhone:** To lock the screen orientation in portrait mode, double tap on the home button. This displays a list of controls, and, on the left, the orientation lock (a circular arrow with a lock). Tap it to lock as portrait.

# 2.4. Volume Settings

The volume settings on the device must be turned up so the alert sound is easier to hear. The alert can be difficult to hear when outside or in noisy situations. A volume that seems too loud when all else is quiet may not be heard other situations.

#### 2.5. Charge the device

Remember to charge the device and give participants a charger with the device if necessary.

# 2.6. Participant device preparation

Participants can use their preferred settings on their iDevices as long as they can access and respond to the survey. However, they need to:

1. Download the App from the App store.

2. Activate the email account on their device so they can receive the survey and email their responses.

It is also preferable if they can activate vibrate on their iPhone to augment the alert sound.

N.B. The alert sound used in the survey will apply only to the P.I.E.L Survey App. It will not interfere or change any of their own alert or message sounds.

# **Chapter 3: Exporting Results**

When a project is complete, the survey results can be exported via iTunes or email. They are exported as a .csv file with one output file per project (see the diagram below). Unopened survey runs (i.e., that have not been responded to) are not saved or recorded. Every 3 lines reports on one survey run. The first line of a survey run has "Start time" and "End time" headings in Columns A and B and question numbers from Column C on. The second line has the start and end timestamps in Columns A and B and the responses listed from Column C on. The third line is a timestamp for each response.

· · · · ·																						
	A	В	С	D	E	F	G	Н	1	J	K	L	М	N	0	р	Q	R	S	T	U	V
1	Survey Name	Inclusion Pilot																				
2	Survey Author	Demo																				
3	Survey Version	1																				
4	Subject ID	Demo																				
5																						
6	Start Time	End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
7	2012-09-12T08:30:06+1000	2012-09-12T08:30:32+1000	3	3	3	3	3	3		2	2		3	3	4	3	4	3	4	4		
8			2012-09-1	12012-09-	12012-09-1	2012-09-1	2012-09-1	2012-09-:	12T08:30:1	2012-09-	12012-09-1	2T08:30:1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	L2T08:30:29	9+1000
9	Start Time	End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
10	2012-09-12T08:40:07+1000	2012-09-12T08:40:33+1000	3	3	3	3	3	3		2	2		3	3	4	3	4	3	4	4		
11			2012-09-1	12012-09-	12012-09-1	2012-09-1	2012-09-1	2012-09-:	12T08:40:1	2012-09-	12012-09-1	2T08:40:1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	L2T08:40:29	9+1000
12	Start Time	End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
13	2012-09-12T08:51:16+1000	2012-09-12T08:51:42+1000	3	3	3	3	3	3		2	2		3	3	4	3	4	3	4	4		
14			2012-09-1	12012-09-	12012-09-1	2012-09-1	2012-09-1	2012-09-:	12T08:51:2	2012-09-	12012-09-1	2T08:51:2	2012-09-1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	L2T08:51:38	8+1000
15	Start Time	End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
16	2012-09-12T14:20:08+1000	2012-09-12T14:21:43+1000	1	3	3	3	2	2		2	1	2	2	2	2	2	2	2	2	2		
17			2012-09-1	12012-09-	12012-09-1	2012-09-1	2012-09-1	2012-09-	12T14:20:5	2012-09-	12012-09-1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	L2T14:21:40	0+1000
18	Start Time	End Time	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
19	2012-09-12T14:31:02+1000	2012-09-12T14:32:44+1000	2	2	3							3	3		4	2	4	2	2	2		
20			2012-09-1	12012-09-	12012-09-1	L2T14:31:2	2+1000					2012-09-1	2012-09-1	2T14:32:1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	2012-09-1	L2T14:32:40	0+1000
21																						

**Exporting results via iTunes file sharing :** Connect device to the computer. Unlock it and iTunes should come up. Go to the device in the iTunes window. Click on the Apps tab and scroll down to file sharing. Click on the App and the survey and result file (.csv) should appear. Click on the upload file and save to selected destination. Alternately you can directly drag the result file from iTunes to your desired folder.

**Exporting results via email:** Results will be emailed to the address in listed in the author-email field (section 1.3.2). When the last run of the project has been offered (irrespective of whether or not it was responded to), an alert will appear asking participants if they would like to email the results back now or later. If participants opt to email results later, to do this they will need to go to the P.I.E.L. Survey home screen (section 1.2) and tap the arrow to the right of the survey name.

# Chapter 4: Utilising Vision Accessibility features

The P.I.E.L. survey App has been designed to be accessible to people who use text to speech (voiceover) and enlargement options to access print.

# 4.1. Using Voiceover

The P.I.E.L. Survey App can be accessed using most standard\* voiceover gestures on iDevices. To learn more about voiceover gestures on these go to: Settings>General>Accessibility>Voiceover

Also refer to http://www.visionaustralia.org/atpodcasts/

When a survey is due, the alert will sound followed by an announcement of time and date and that a notification has been received. The surveys and questions follow the same sequence as described in the sections on survey runs (section 1.8.1.) and question sequence (section 1.8.2.).

Do not keep headphones plugged into the device after a survey run has finished as it will prevent the next alert sound being heard externally. The alert sound will only be heard via the headphones.

If a survey is opened before the alert sound has finished, the alert sound may run over the top of voiceover when the first question is presented. However as it often takes a few seconds to locate a device and open the survey this is usually not a problem.

\*There is one exception to these standard gestures. Participants cannot use the standard 2 finger scrub gesture to get to the "Back" button because in the P.I.E.L. Survey App the "Back" button is positioned at the bottom left hand corner of the screen. The decision was made to have the "Next" and "Back" buttons at the bottom, rather than the top of the screen (as is customary), so that novice voiceover users would not get stuck in the status bar when answering surveys.

# 4.2. Using Zoom Functions

The default survey format is well contrasted, black on white. It also has a useful font size and can be used with the zoom (enlargement) functions of iDevices. To learn about zoom functions on these devices go to: Settings>General>Accessibility>Zoom