

PERNASVIP

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DEMONSTRATIONS PLAN

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PERNASVIP

DEMONSTRATIONS PLAN

Version – 3.0

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Change Records

Issue	Date	Description	Author
1	01/07/2011	First contractual version of the document	Navocap
1.2	18/07/2011	Version after reviewer comments.	Navocap
1.3	21/07/2011	Final version	Navocap
2.0	12/09/2011	Returns after tests in San Sebastian.	Navocap
3.0	04/10/2011	The results are no longer part of the document, and are now in the document D11.	Navocap

1 - INTRODUCTION

1.1 Scope of the document

The objective of this document is to define the conduct of the tests to demonstrate that the system is operational.

1.2 Plan

The document describes the conduct of tests, and the test sheets to complete.

2 – CONDUCT OF TESTS

2.1 Conduct of tests

Each visually impaired pedestrian (VIP) is accompanied by an experimenter who records verbal reports and behaviors, and complete the demonstrations plan.

The experimenter possesses the demonstrations plan to monitor the tests of various functions and to record for each test and for each expected result: verbal reports and behaviors of the tester, and the final result.

The section “Test sheets” lists all the tests to be performed. Each test is identified by a number and title. The tests are performed in the order of the test sheets.

The description of actions to perform to complete the test number x, the methodology to be followed (equipment used, etc.), and the description of the expected result is contained in the test sheet number x.

2.2 General scenario of the test

The objective is to test a maximum of functionalities of the system PERNASVIP by following a possible scenario of daily life.

All users will prepare two itineraries:

- From a common point of departure to a distinct intermediate point (ie to a doctor) for each user;
- From this doctor to a common terminus.

Once arrived to the doctor, the user needs to go to the pharmacy but did not prepare this route. So he will contact Angéo Home to obtain the itinerary from doctor to pharmacy and from pharmacy to the terminus.

He will test the itinerary from the doctor to the pharmacy.

Then, by testing the itinerary from the pharmacy to the arrival, the user wishes to avoid a street under construction. The system will recalculate automatically an itinerary to arrive at the common terminus.

The experimenter explains each step at the tester; then the test is realized by the tester.

The observations and the behaviours of the tester (VIP) are annotated by the experimenter in the field "Note the Verbal report & Behaviours".

When the step is passed, the experimenter note the result of a step in the "Result : Error/Success" : if the obtained result corresponds at the expected result. In case of non-compliance, a note is made to explain what is different between the expected result and the obtained result. Otherwise, the result is annotated "OK".

The tests will be conducted on two days:

The first day will be spent preparing two itineraries by user and transfer it in the embedded system Angéo Mobile assigned to the user: **test n°x to test n°y**

The second day will permit to test the navigation along these itineraries with Angéo Mobile: **test n°x to test n°y**

3 - TEST SHEETS

3.1 Preliminaries

To be completed :

Address of the common point of departure :

Address of the intermediate point (the doctor):

Address of the common Terminus:

ID of Angéo Mobile:

3.2 List of tests

Here the lists of the tests to perform and compete:

- WS_AWS_001: Access to the Web Site
- WS_CGC_002: Configuration of General Constraints
- WS_CPI_003: Configuration of the Personal POI
- WS_IP_004: Itinerary preparation
- AH_TIF_005: Transfer Itinerary File
- AM_CAM_006: Configuration of Angéo Mobile
- AM_SI_007: Selection of an itinerary
- AM_PN_008: Multi-modal navigation
- AM_CAH_009: Contact Angéo Help
- AM_IR_010: Itinerary recalculation
- AH_PFR_011: Point File Recovery
- WS_USP_012: Upload saved Points of interest

3.2.1 WS_AWS_001: Access to the Web Site

TEST SHEET	Reference : WS_AWS_001	Tester:	Date :
		Monitor:	

RESUME OF THE TEST

The objective is to test the access to the web site.

TEST REQUIREMENT

The web site has to be accessible from any computer connected to Internet.

Scenario	Expected result	Verbal reports & Behaviors	Result : Error / Success
Launch the web site : http://212.81.220.68:8585/PernasvipServlet/	The user access to the 'Login' page.		
Click on the button 'Create new account'.	The 'Registration' page permit to		

	<p>complete the Username, e-mail and password.</p> <p>The user can choose the country and the city to test.</p>		
<p>Complete the registration and click on 'Submit'.</p>	<p>The user access to the 'Main Menu' page.</p>		
<p>Click on the button 'Logout'.</p>	<p>The user access to the 'Login' page.</p>		
<p>Complete 'Username' and 'Password', and click on 'Login' button.</p>	<p>The user access to the 'Main Menu' page. The web site indicates the concerned city.</p>		

	Website shall be adapted to visually impaired people.		

3.2.2 WS_CGC_002: Configuration of General Constraints

TEST SHEET	Reference : WS_CGC_002	Tester:	Date :
		Monitor:	

RESUME OF THE TEST

The objective is to configure the general constraints according to the user.

TEST REQUIREMENT

The web site has to permit to configure the general constraints for the itinerary calculation.

Scenario	Expected result	Verbal reports & Behaviors	Result : Error / Success
Once logged on the web site, click on the button 'GENERAL CONSTRAINTS'.	The user access to the 'General constraints' page.		
Select the itinerary options, the points to	The user access to the 'Main		

prioritize and to avoid, and click on the button 'Accept'.	Menu' page and the configuration is saved.		
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3.2.3 WS_CPI_003: Configuration of the Personal POI

TEST SHEET	Reference : WS_CPI_003	Tester:	Date :
		Monitor:	

RESUME OF THE TEST

The objective is to configure the personal point of interest to be saved by the web site.

TEST REQUIREMENT

The web site has to permit to configure and to save personal POI.

Scenario	Expected result	Verbal reports & Behaviors	Result : Error / Success
Once logged on the web site, click on the button 'POIS MANAGEMENT'	The user access to the 'Personal POI' page. The first time, there is no POI saved.		
Click on 'Add a new Point of Interest'.	The 'Information of Point of		

	<p>Interest' page is launch and permits to complete :</p> <ul style="list-style-type: none"> - address or Latitude/longitude data, - a short name of POI, - a description, - the POI type, - the checkbox 'Public' (to share the POI with others users) 		
<p>Complete an address (number, street), a short name and a description of a point of interest to be save (for example your address), select Green Point in the POI type section and click on the button 'Submit'.</p>	<p>The green POI is saved.</p>		
<p>Click on 'Add a new Point of Interest' and add a new black POI (point to avoid) – for example a street difficult to cross.</p>	<p>The black POI is saved.</p>		
<p>Click on 'Add a new Point of Interest'</p>	<p>The white POI is saved.</p>		

and add a new white POI (point to prioritize) – for example a street easy to cross.			
Complete all others POIs you would like to add.	POIS are saved.		

3.2.4 WS_IP_004: Itinerary preparation

TEST SHEET	Reference : WS_IP_004	Tester:	Date :
		Monitor:	

RESUME OF THE TEST

The objective is to prepare two itinerary from the web site : the first from the Departure point to the doctor, the second from the doctor to the Terminus point.

TEST REQUIREMENT

The web site has to permit to prepare itinerary file to be transmitted to the embedded system, *“at home without any satellite signal”*

Scenario	Expected result	Verbal reports & Behaviors	Result : Error / Success
Once logged on the web site, click on the button 'Itinerary calculation'.	The user accesses to the 'Origin' page, allowing complete the starting point of the itinerary.		

<p>Complete the origin of the first itinerary to prepare and click on the button 'Next'.</p>	<p>The user accesses to the 'Destination' page, allowing complete the destination point of the itinerary.</p>		
<p>Complete the destination of the first itinerary and click on the button 'Next'.</p>	<p>The user accesses to the 'Intermediate point' page, allowing complete an optional intermediate point.</p>		
<p>Complete an optional intermediate point of the itinerary and click on the button 'Continue' or click directly on the button 'Continue', depending on the desired itinerary.</p>	<p>The user accesses to the 'Information during the trip' page, allowing add optional generic points of interest.</p>		
<p>Complete optional 'Information during the trip' and click on the button 'Continue' or click directly on the button 'Continue', depending on the</p>	<p>The itinerary is calculated. A page with a summary of the route and buttons 'Create file' and 'Return Trip calculation' is</p>		

desired itinerary.	displayed.		
	The user can visualize the prepared itinerary.		
	The itinerary is consistent with the the departure, arrival and optional intermediate points completed.		
Click on the button 'Create File' to save the itinerary file in your computer.	The file is generated.		

Prepare the others itineraries and generate the files in the same way.	The files are generated.		
Click on the button “Logout” of the web site	The “Login” page is displayed.		

3.2.5 AM_CAM_005: Configuration of Angéo Mobile

TEST SHEET	Reference : AM_CAM_005	Tester:	Date :
		Monitor:	

RESUME OF THE TEST

The objective is to configure the Angéo Mobile for the user.

TEST REQUIREMENT

Angéo Mobile must switch from French to Spanish and vice-versa.

Scenario	Expected result	Verbal reports & Behaviors	Result : Error / Success
Turn on the device by a long press on the power button.	The device indicates it is operational after a few tens of seconds.		
With the scroll keys, select menu	The menu "settings" is selected.		

<p>“settings” and validate.</p>			
<p>Select “language” menu and validate.</p>	<p>The menu proposes to selected French or Spanish.</p>		
<p>Select Spanish mode, validate and return to the main menu by a long press on the validate button.</p>	<p>Angéo Mobile is now in Spanish.</p>		

3.2.6 AH_TIF_006: Transfer Itinerary File

TEST SHEET	Reference : AH_TIF_006	Tester:	Date :
		Monitor:	

RESUME OF THE TEST

The objective is to transfer prepared file(s) to the Angéo Mobile device.

TEST REQUIREMENT

The software Angéo Home has to permit to transfer itinerary file from computer to Angéo Mobile device via USB connection.

Scenario	Expected result	Verbal reports & Behaviors	Result : Error / Success
Turn on the device by a long press on the power button.	The device indicates it is operational after a few tens of seconds.		
Connect the device to a USB of the	The driver is installed.		

<p>computer and accept the installation of the driver.</p>			
<p>Launch the 'Angéo Home' application and click on the button 'Connect'.</p>	<p>The button 'Connect' goes from red to green color. The name of the embedded system is completed.</p>		
<p>Click on the button 'Transfer itinerary files'.</p>	<p>A dialog box proposes to choose itinerary file(s) to add to the device.</p>		
<p>Choose one or more files and validate.</p>	<p>Files are added to the device.</p>		

Disconnect the device from the USB and close the application.	The application is closed.		

3.2.7 AM_SI_007: Selection of an itinerary

TEST SHEET	Reference : AM_SI_007	Tester:	Date :
		Monitor:	

RESUME OF THE TEST

The objective is to select the first itinerary (from Departure point to Doctor) for the navigation.

TEST REQUIREMENT

Angéo Mobile must propose all itineraries prepared and transferred from the web site to the device.

Scenario	Expected result	Verbal reports & Behaviors	Result : Error / Success
Once the device is Turned on, select the “Itinerary” menu.	The device provides a list of all itineraries prepared.		
Select the desired itinerary and validate.	The itinerary is selected and the		

	device proposes to launch the navigation with this itinerary.		
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3.2.8 AM_PN_008: Multi-modal navigation



For the test below, the monitor will plot on the map the path followed by the user.



TEST SHEET	Reference : AM_PN_008	Tester:	Date :
		Monitor:	

RESUME OF THE TEST

The objective is to validate the navigation following a prepared itinerary from the web site (the first itinerary).

TEST REQUIREMENT

Angéo Mobile has to guide visually impaired people and blind people (with dog and/or white cane), telling them concisely and precisely where and when *“to turn left, right or go straight on”*.

Scenario	Expected result	Verbal reports & Behaviors	Result : Error / Success
Once the Angéo Mobile turned on and the itinerary selected, select the menu “Navigation”.	The menu is selected.		
Launch the navigation and let yourself be guided by the instructions.	The system shall give an itinerary abstract.		

<p>Mark inaccessible areas by adding reference black points.</p>			
	<p>When turned on, the embedded system shall be operational in less than 2 minutes.</p>		
	<p>Once operational, the user should be able to request at any moment the system status, except in phone mode</p>		
	<p>In navigation mode, the user is guided all along the path of the selected itinerary and shall know where to turn left, and where to turn right at an intersection.</p>		

	Pronunciation shall be understandable		
	Green POIs selected during the preparation of itinerary are displayed according to the configured radius.		
	Optional (depending on the itinerary) : When you have to take the bus, consign at stop bus shall permit to understand how to reach the next stage by bus		
	Optional (depending on the itinerary) : When you have to take the metro, consign at stop metro shall permit to		

	understand how to reach the next stage by metro		
	Optional (depending on the itinerary) : When you have to take the tramway, consign at stop tramway shall permit to understand how to reach the next stage by tramway		
	Optional (depending on the itinerary): During the bus/metro/tramway mode, the user should be able to listen to the consign to reach the next stage.		
	The embedded system shall permit to save Green POIs		
	The embedded system shall		

	<p>permit to save Black POIs</p>		
	<p>Angéo Mobile shall permit to know the street and the orientation of the user by a press on the button “Where am I?”.</p>		
	<p>Once arrived to the objective, the system reports that you are arrived and quits automatically the navigation mode.</p>		

3.2.9 AM_CAH_009: Contact Angéo Help



For the test below, the monitor will plot on the map the path followed by the user.



TEST SHEET	Reference : AM_CAH_009	Tester:	Date :
		Monitor:	

RESUME OF THE TEST

The tester is arrived at the doctor and need to go to a pharmacy but did not prepare this itinerary. So he will contact Angéo Help to explain his problem and will receive new itinerary to go to the pharmacy and then to go from the pharmacy to the arrival point.

The objective is to validate the communication with Angéo Help, the transmission of the position during the call and the preparation and transfer of new itineraries.

TEST REQUIREMENT

The system must be *“error tolerant”* and must permit to the user to contact in real-time a call-center to be reassured and/or to obtain another itinerary.

Scenario	Expected result	Verbal reports & Behaviors	Result : Error / Success
Once Angéo Mobile turned on, do a long press on the “Contact Angéo Help” button.	Angéo Mobile contact automatically the call center “Angéo Help”.		

	After a few seconds, you interact with the hotline.		
Ask the hotline to prepare the required itinerary (from your actual position to the pharmacy; and from the pharmacy to the appointment).	The hotline can localize your Angéo Mobile after one minute maximum.		
	The hotline searches a pharmacy around your position and prepares itinerary for you.		
	At the end of the conversation, the call is automatically		

	<p>disconnected and Angéo Mobile automatically downloads the new itineraries.</p>		
	<p>Download an itinerary file should take less than a minute.</p>		
<p>At the end of the download, enter in the “Itinerary” menu.</p>	<p>The list contains the downloaded itineraries (from doctor to pharmacy and from pharmacy to terminus point).</p>		
<p>Select the new itinerary (the route that goes through the pharmacy) and let yourself be guided by the instructions.</p>	<p>Angéo Mobile guides you to the pharmacy.</p>		

TEST SHEET	Reference : AM_IR_010	Tester:	Date :
		Monitor:	

RESUME OF THE TEST
<p>Once arrived to the pharmacy, the tester would like to go to the terminus point.</p> <p>After a few meters, the tester will realize that a part of the route is too difficult to cross (for example in construction), so he will avoid this part of the path to trigger an automatic recalculation of route.</p> <p>The objective is to validate the recalculation of a part of pedestrian itinerary.</p>

TEST REQUIREMENT
<p>Angéo Mobile has to be able to recalculate a portion of pedestrian itinerary to retrieve the planned itinerary when the user is lost or when a portion of road is under construction.</p>

Scenario	Expected result	Verbal reports & Behaviors	Result : Error / Success
<p>Once arrived at the pharmacy, leave the road as if the indicated path was closed (under construction).</p>	<p>Angéo Mobile tells you at first to turn back.</p>		

<p>Continue to get away from your way to get out of more than 50 meters from the planned route.</p>	<p>The system automatically detects that you move too far from the route. It broadcasts a message to notify the itinerary must be recalculated and proposes to select where you wish to join the prepared route.</p>		
<p>Once the message of recalculation is broadcasted, press repeatedly the button “Next” to listen to the choices.</p>	<p>The embedded system proposes the list of point to join.</p>		
<p>Select the desired point (the second for example) and validate with the button OK.</p>	<p>The embedded system recalculates the itinerary and returns to the navigation.</p>		

Once the itinerary recalculated, let yourself be guided by the instructions.	Angéo Mobile guides you to the appointment.		
Once arrived, turn off Angéo Mobile by a long press on the power button.	Angéo Mobile indicates it is under extinction.		

3.2.11 AH_PFR_011: Point File Recovery

TEST SHEET	Reference : AH_PFR_011	Tester:	Date :
		Monitor:	

RESUME OF THE TEST

The objective is to recover the file of the points of interest saved by Angeo mobile.

TEST REQUIREMENT

Angéo Home has to be able to recover the file of point of interest to be uploaded to web site.

Scenario	Expected result	Verbal reports & Behaviors	Result : Error / Success
Turn on the device by a long press on the power button.	The device indicates it is operational after a few tens of seconds.		
Connect the device to a USB of the	The button 'Connect' goes from		

<p>computer and launch the 'Angéo Home' application and click on the button 'Connect'.</p>	<p>red to green color. The name of the embedded system is completed.</p>		
<p>Click on the button 'Download POI file'.</p>	<p>A dialog box proposes to choose where to save the file.</p>		
<p>Choose the path and validate.</p>	<p>File is saved in the computer.</p>		
<p>Disconnect the device from the USB</p>	<p>The application is closed.</p>		

and close the application.

3.2.12 WS_USP_012: Upload saved Points of interest

TEST SHEET	Reference : WS_USP_012	Tester:	Date :
		Monitor:	

RESUME OF THE TEST

The objective is to upload the file of POIs to the web site.

TEST REQUIREMENT

The web site has to permit to upload POI saved by Angéo Mobile.

Scenario	Expected result	Verbal reports & Behaviors	Result : Error / Success
Launch the web site : http://212.81.220.68:8585/PernasvipServlet/	The user access to the 'Login' page.		
Complete 'Username' and 'Password', and	The user access to the 'Main		

click on 'Login' button.	Menu' page. The web site indicates the concerned city.		
Once logged on the web site, click on the button 'POIS MANAGEMENT'	The user access to the 'Personal POI' page. The first time, there is no POI saved.		
Click on 'Add a new Point of Interest'.	The 'Information of Point of Interest' page is displayed.		
Click on "Choose a file" button.	A dialog box permits to choose		

	the path of the file to upload.		
Choose the file to upload and validate.	The POIs are uploaded to the web site.		
	The website permits to manage each POI by completing or changing the name and the comments.		
	The user can choose which		

	Black POI he would like to share with all others users.		
	Once the POI is checked as 'Public', each user can considerer which black POI he would like really to avoid, according to his personal considerations.		
	The definition of future itineraries will use these POIs.		