

University of Nevada, Reno
College of Engineering
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PANVOYAJ

CS 420 Human-Computer Interaction
Project Part 2: Requirements and Design


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Team 06

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Use Cases & HCI Scenarios:

<i>HCI Persona</i>	
Archetype	The Accountant
Photo	
Name	Cassandra Nguyen
Job Title	Entry-Level Account Executive
Demographics	<ul style="list-style-type: none">- 27 years old- Engaged- Two cats- Bachelor of Science in Accounting- Certified Public Accountant (CPA)
Goals	Plan a trip to Rio de Janeiro for the 2016 summer Olympics for herself and her fiance.
Environment	She has a fairly old computer she uses for her job (including work related emails and word processing), but she prefers to keep her personal computing separate. She mainly uses a Samsung Galaxy S5 for casual web browsing, social media, and keeping up with several Youtube shows. She also has a laptop as well for more serious tasks.
Scenario	Having recently become Engaged, Cassandra and her fiance decide to go to Rio de Janeiro, Brazil during the 2016 Olympic Games for their honeymoon. She navigates to the site, and navigates to the sub-page for Rio de Janeiro. Once there, she is treated to an interactive air panorama of the city. Below, will be highlighted the coming attractions, and options for building her vacation including a variety of travel widgets to look at local maps, restaurants, weather, and rentals for a car and lodging.

Use Case Diagram

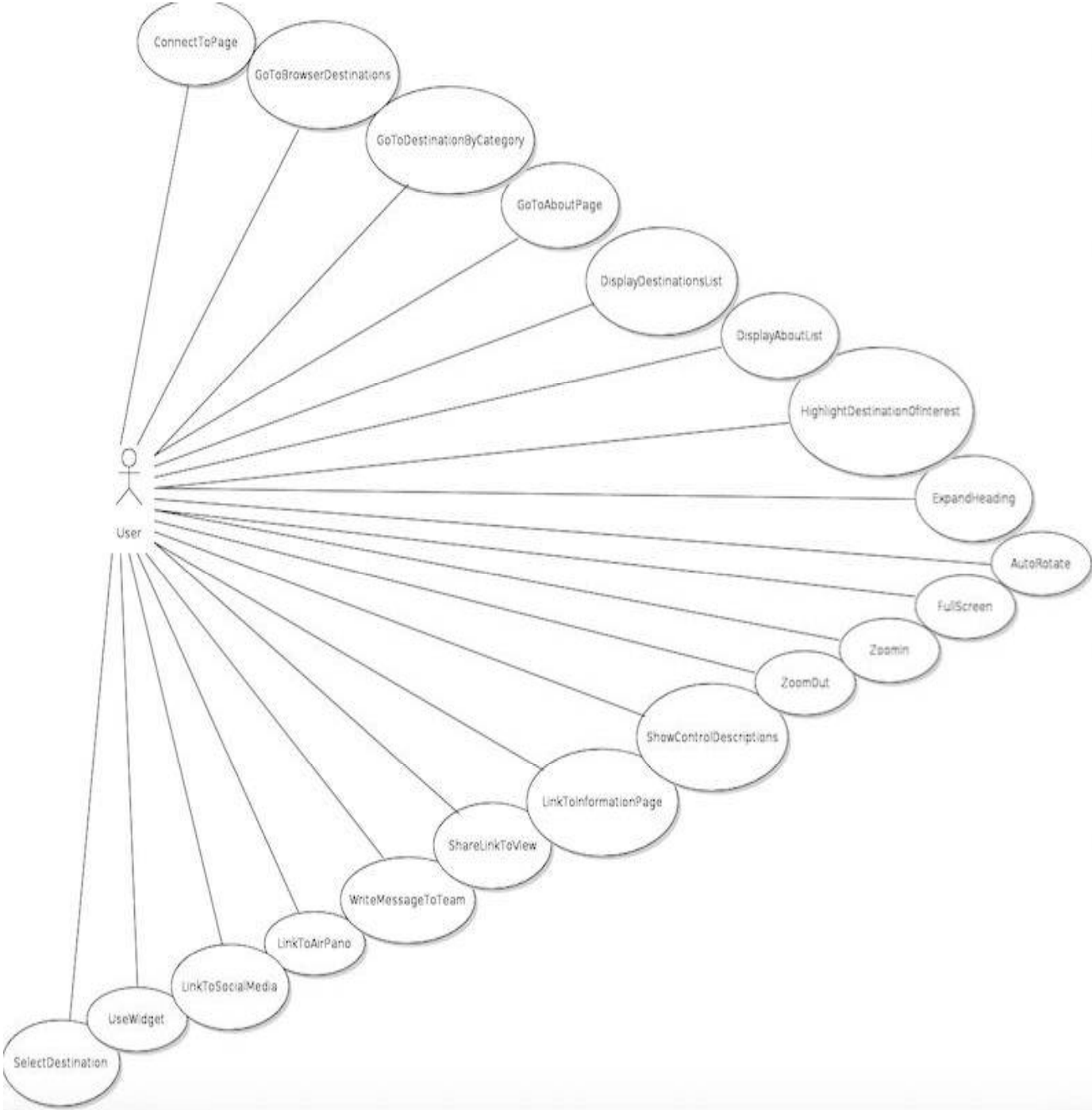


Figure 1: Use case diagram.

Detailed Use Cases

<i>Use Case Descriptions</i>		
UC01	ConnectToPage	The user enters the URL http://panvovaj.my-free.website into any operational web browser. The user will press enter to input the URL to the browser. This will direct the user to the home page of the website and the homepage will appear automatically to the user.
UC02	GoToBrowserDestinations	The user can input a left mouse click on the "BROWSER DESTINATIONS" button which will direct the user to the "BROWSER DESTINATIONS" page.
UC03	GoToDestinationByCategory	The user can input a left mouse click on the "DESTINATION BY CATEGORY" button which will direct the user to the "DESTINATION BY CATEGORY" page.
UC04	GoToAboutPage	The user can input a left mouse click on the "ABOUT" button which will direct the user to the "ABOUT" page.
UC05	DisplayDestinationsList	The user can hover the mouse over the "BROWSE DESTINATIONS" button to display a list of destinations. If the user inputs a left mouse click on any of the destinations on this list, the user will be directed to the respective page of the destination chosen.
UC06	DisplayAboutList	The user can hover the mouse over the "ABOUT" button to display a list that contains the "CONTACT" heading. If the user inputs a left mouse click on the "CONTACT" heading, the user will be directed to the "CONTACT" page.
UC07	HighlightDestinationOfInterest	The user can hover the mouse over the picture of any destination on any page which will highlight the name of the destination located under the picture. This will allow the user to be aware of where the mouse is interacting with the destination picture.
UC08	ExpandHeading	On the homepage, the user may hover the mouse over the headings located at toward the bottom of the page. This will cause the heading to expand in size. These headings give descriptions of the functionalities provided to the user in the website.

UC09	AutoRotate	On each page made for a destination, the user will have a panoramic view of that destination. The user can hover over the Autorotate button and select it to be on or off. This will rotate the panoramic view around a 360 degree axis.
UC10	FullScreen	On each page made for a destination, the user will have a panoramic view of that destination. The user can select the Full Screen button and select it to be on or off. This will direct the user's screen into or out of a full screen mode.
UC11	ZoomIn	On each page made for a destination, the user will have a panoramic view of that destination. The user can select the Zoom In button. This will direct the user's screen closer to the area the user is focused on.
UC12	ZoomOut	On each page made for a destination, the user will have a panoramic view of that destination. The user can select the Zoom Out button. This will direct the user's screen further away from the area the user is focused on.
UC13	ShowControlDescriptions	On each page made for a destination, the user will have a panoramic view of that destination. The user can select the "?" button. This will display to the user what each control on the page does.
UC14	LinkToInformationPage	On each page made for a destination, the user will have a panoramic view of that destination. The user can select the "i" button. This will direct the user to a page containing information about that destination.
UC15	ShareLinkToView	On each page made for a destination, the user will have a panoramic view of that destination. The user can select the share button. This will direct the user to share their current view in the user's choice of social media site.
UC16	WriteMessageToTeam	The user can submit a message to the team on the "CONTACT" page of the website. The user is able to input their name, phone number, and email. The user can then click the submit button to send the message to the team.
UC17	LinkToAirPano	The user can select the link at the footer of any web page page that will direct the user to airpano.com.
UC18	LinkToSocialMedia	The user can select the link at the footer of any web page

		page that will direct the user to the respective social media outlet.
UC19	UseWidget	The user can select the widget at embedded within the web page of any destination. This will allow the user to access the functionality of that wideget.
UC20	SelectDestination	The user can click the mouse on the picture or name of any destination on any page. This will allow the user to be directed to the page of the destination that the user clicked on.

Table 1: Detailed Use Cases.

Functional Requirements:

Requirement	Priority	Description
R01	1	The system will allow the user to access the web page by entering the URL into any type of browser.
R02	1	The system will display a "HOME PAGE" link at the top of the homepage of the website. This link directs the user to the home page of the website.
R03	1	The system will display a "BROWSE DESTINATIONS" link at the top of the homepage of the website. This link directs the user to a web page that displays a grid of destinations that are available. If the user hovers the mouse over this link, a list of links will appear that-if clicked on-directs the user to the respective destination page.
R04	1	The system will display a "DESTINATIONS BY CATEGORY" link at the top of the homepage of the website. This link directs the user to a web page that sorts the destinations into different categories.
R05	1	The system will display an "ABOUT" link at the top of the home page web site. This link directs the user to a web page that provides information about the team. If the user hovers the mouse over this link, a link will appear that-if clicked on-directs the user to the "CONTACT" page.
R06	1	The system will allow the user to scroll down every web page and subpage.
R07	1	The system will display a world map with the caption "WHERE WILL YOU GO?" on the homepage of the website.
R08	1	The system will display a grid composed of travel destinations under the world map on the homepage of the website.
R09	1	The system will highlight the name of the destination if the user hovers the mouse over the picture or name of the destination.
R09	1	The system will display the name of the website above the world map on the homepage.
R10	1	The system will display the objective of the website next to the name of the website on the homepage.

R11	1	The system will display multiple sections containing information about each destination at the bottom of the homepage. The headings of each section will expand toward the user if the mouse hovers over it.
R12	1	The system will divide the destinations into the categories: "LOW COST DESTINATIONS", "AVERAGE COST DESTINATIONS", "LAVISH DESTINATIONS", "COOL/COLD CLIMATE DESTINATIONS", "HOT CLIMATE DESTINATIONS", "DESTINATIONS FOR THE ADVENTUROUS", "FOODIE DESTINATIONS", and "ALL DESTINATIONS". These categories will be presented to the user on the "DESTINATIONS BY CATEGORY" page.
R13	1	The system will depict a panoramic view-imported from airpano.com-of the destination at the top of the page of each respective destination.
R14	1	The system will provide the name of the destination with a description about the destination at the top of each destination's page.
R15	2	The system will provide the user with a Tripadvisor widget at the web page of the destination.
R16	2	The system will provide the user with a Google Maps widget at the web page of the destination.
R17	2	The system will provide the user a Travel Visa widget at the web page of the destination.
R18	2	The system will provide the user a weather widget at the web page of the destination.
R19	2	The system will provide the user a car rental widget at the web page of the destination.
R20	2	The system will provide the user a flight availability widget at the web page of the destination.
R21	2	The system will display the location of the team at the University of Nevada, Reno, the contact information of the team, a prompt to fill in the user's name, a prompt to fill in the user's phone number, a prompt to fill in the user's e-mail, and a prompt to fill in a message that will be sent to the team.

R22	2	The system will provide the user with the button option to submit the a message to the team via e-mail.
R23	2	The system will provide links on the footer of every page to the Facebook, Twitter, Google Plus, and LinkedIn page for the Panvoyaj project.
R24	3	The system will provide a web page for every destination that a user can travel to.
R25	3	The system will provide the user with pricing and purchasing capabilities for car rentals, hotels, restaurants, flights and any other necessities for their trip.

Table 2: Functional Requirements.

DESIGN:

HIGH LEVEL DESIGN:

Designing the project required aspects of high-level design. The site map for the project is displayed in Figure 1. The site map was used to design a hierarchical structure of pages. Additionally, a state chart diagram was created to show the lifetime of a traditional user’s experience on the site. This is shown in Figure 2.