Needs, Requirements, Prototype
Due: Monday, March 21, Noon
Attention: On the due date remember to hand in both an electronic copy to
cs125a@cs.brandeis.edu and to turn in a paper copy.

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Part A

1. General information	
How did you identify the requirements and needs (observation, review tools etc)? Why did you choose that method?:	I started by looking at the current version of Yahoo maps and I took some time to interact with it in any possible way. I observed……… After that I had a couple of people use the application to get specific directions, I watched them while they interacted with the system and noticed that…..blah blah blah……. After they were done solving the tasks I interviewed them separately and they answered the predefined questions (attached as additional material)…….. ……… I chose this method because……blah blah blah....
How did you record your findings:	All my data collection was done by taking notes……. While watching them solve the tasks I noted important features, and problems such as blah blah blah…… After the experiment they answered the questionnaires and I also wrote down all the interesting design issues we discussed…..

2. User profiles	
User type:	General internet user 1 – Gets driving directions and map
User description:	This user is a general internet application user. The user is quite familiar with how to use and interact with various common types of interfaces in modern websites……blah blah blah
Use case scenario:	A man from Waltham goes on a business trip to Charleston, South Carolina. He gets his rental car at the airport and at the car rental place there is a courtesy computer so people

	can print out directions if need to. The man goes to the Yahoo maps website…….blah blah blah blah.
Tasks: (Add the task numbers to the use case diagram).	1. Route through a particular point. 2. Being able to selectively zoom in on different parts of the map. 3. Blah blah blah blah
User type:	General internet user 2 – Seeking maps of particular locations and their surrounding areas.
User description:	This users is somewhat familiar with computers. He should need some support at least made available to him in the interface without slowing him down or other more advanced users…..blah blah blah
Use case scenario	A woman wants to retrieve a map of the surroundings of Kendall Square in Cambridge. She is going to look for an apartment there and wants to see which major highways and streets are close to that area . She might even get driving direction later. She goes to her computer in her current apartment which is in Wellesley and starts exploring the locations around Cambridge using Yahoo maps…blah blah blah
Tasks:	1. Route through a particular point. 2. Being able to selectively zoom in on different parts of the map. 3. Blah blah blah blah

Use case diagram: (INSERT PICTURES HERE) This part is optional. You may wish to skip it if it does not provide anything interesting to your project.

Route through a particular point. (Task-1)

Selectively zoom in on different parts of the map. (Task-2)

Blah blah blah (Task-3)

General internet user 2
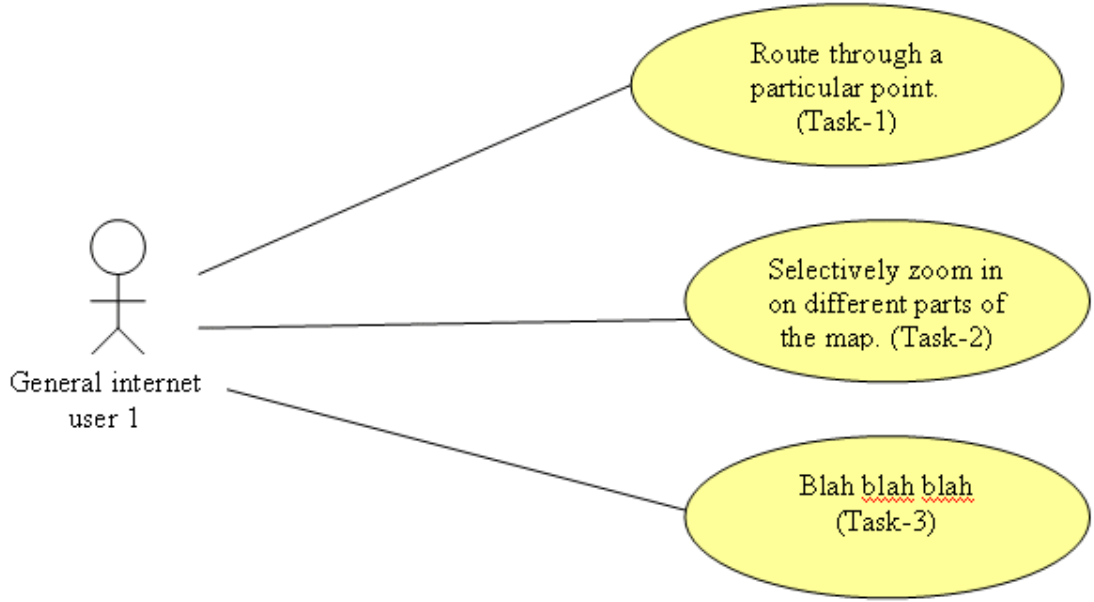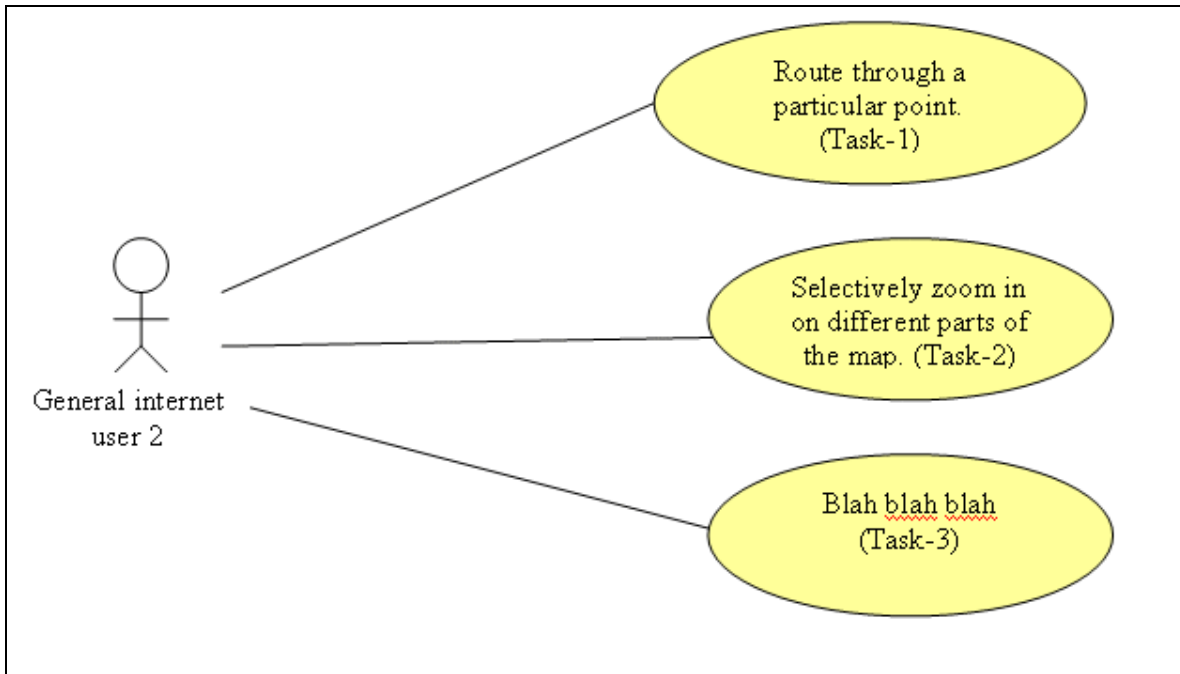
3. Needs
Identify the needs (for each user). What are the needs each user has based on each of the tasks you listed in part 2.
General internet user 1 – Route through a particular point. • He/She needs to be able to find directions between two locations • The user needs to be able to get a map displayed that shows the driving directions. • The user needs to be able to get a textual representation of the driving directions. • Blah blah blah • Blah blah …. User 1 -Task 2 • Blah • Blah • Blah Etc etc.

4. Requirements
Identify the system requirements for each of the tasks you identified in part 2. List as many requirements as you think are necessary to support your claim. Most of your requirements will be functional. See if you can find environmental or social requirements.

Requirement id:	1	**Related task id:**	Task - 1
Requirement	Enter information about destination.		

name:	
Requirement type	Functional
Description	The product should allow the user to enter detailed information about the destination.
Rationale:	In order to provide directions the system needs to know the address of the destination.
Source:	User
Dependencies	None.
Conflicts	None.
Supporting Materials	None.

Requirement id:	2	**Related task id:**	Task - 3
Requirement name:	Change colors in Yahoo map interface.		
Requirement type	Environmental		
Description	The interface should provide the user with access to configurable parameters so the user can change the color in the interface that might solve some issues e.g. if the user is color-blind.		
Rationale:	A successful understanding of parts of the information displayed might be dependent on correct color perception. For color-blind users the successful understanding can only be achieved if they can change colors in the layout.		
Source:	User		
Dependencies	None		
Conflicts	None		
Supporting Materials	None		

Requirement id:		**Related task id:**	
Requirement name:			
Requirement type			
Description			
Rationale:			
Source:			
Dependencies			
Conflicts			
Supporting Materials			

5. Task analysis

For each of the tasks you identified in part A you must create both a hierarchical task analysis list and corresponding graphical box-in-line notation. (p. 232):

Hierarchical task analysis for Task-1

Route through a particular point (the task includes entering origin and destination information).

Go to Yahoo maps
Click on driving directions
Enter origin information
  Enter street address
  Enter city
  Enter zip code
Enter information for the point to route through
  Enter street address
  Enter city
  Enter zip code
Enter destination information
  Enter street address
  Enter city
  Enter zipcode
Submit the information
View the displayed results

Blah blah blah……

Part B

1. Conceptual models

Tell us what the three different conceptual models are, and why they include the functionality.

- Model 1: Activity based instructing model
  Applying this type of model to Yahoo maps is the most effective way for the user to interact with the system because this conceptual model would definitely produce much better results under a GOMS analysis of user interaction as compared to any of the other activity based conceptual models – for example exploring and browsing model of inputting an address. Exploring and browsing would be less efficient for the user since he/she would have to go through an enormous amount of information just to locate the desired address that he/she

wants to use.
- Model 2: Model type
  Blah blah blah
- Model 3: Model type
  Blah blah blah

2. Storyboard

Please give us a short description of each of the storyboards. We encourage you to add the storyboard as a jpeg file below accompanied by the description.

Example shown in TA session.

What interesting feedback did you get from the users you showed the storyboards to?
The context switching between the textual representation of the driving direction and the map displaying the route was cumbersome. The users did not immediately see how they would effectively align those representations and compare them.

3. Prototypes

Please tell us briefly about each prototype. We encourage you to add the cards and post-it notes as a picture (jpeg file) here below accompanying the description.

What interesting feedback did you get from the users you showed the prototype to? Did it differ from the feedback you got after showing the storyboards?

4. Advanced prototype

Include your prototype in this assignment as screenshots (jpeg). Accompany the screenshot prototypes with descriptive text that tell us what we are looking at.

Additional material to turn in.
Storyboards, cards and post-it notes if you cannot include them as jpeg files at their respective places. PLEASE NOTE: If you turn in the cards and post-it notes separately (not in a jpeg file) then do so by attaching them to plain paper sheets in whatever order or structure you used so that you can reference them in your answers.