

List of Features

Infinity loop is a social networking website which enables users to see their friends and friends of friends (above 100 connections) as well as organizations such as schools or companies.

1. Network visualization showing “me” (yellow star), my friends (big circles), and friends of friends (smaller circles). (Diagram 1)



Diagram 1.

2. Detailed user profile is accessible by clicking on the picture of a friend. (Diagram 2)

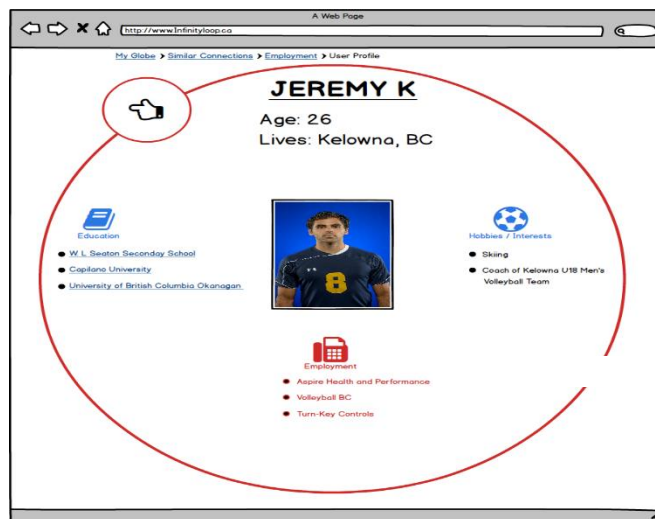


Diagram 2.

3. Navigation from user profile circle to the network can be accessed by clicking on the back button. (pointing finger)
4. Visual indicators displayed on network to show similar users through a pop-down menu at the left side of the screen. (Education, Employment and Hobbies). Following this action, two design options are:

- A. Gathering all similar connections to “me”. (Diagram 3)
- B. The drop down menu can be color-coded as green for education, red for employment and yellow for hobbies. Whenever user clicks on one of these options (i.e. employment), all the similar connections are demonstrated with the corresponding color (red) for connections’ circles. (Diagram 1)



Diagram 3.



Diagram 1.

5. Educational institutes or organizations can be displayed on the network by clicking on either or both of the corresponding toggle switches in the top right of page. (Diagram 4)



Diagram 4.

6. Following step 5, detailed organization profile can be viewed by clicking on the organization icon that appears next to the friend's circle. (Diagram 5)

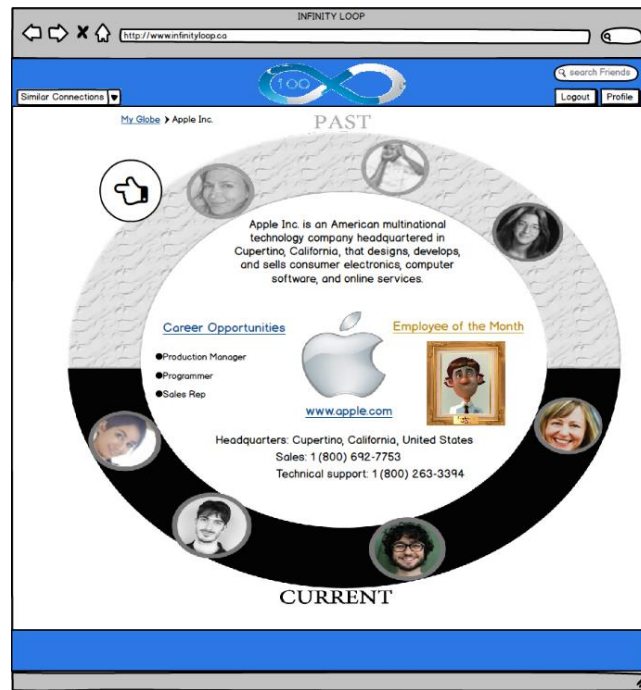


Diagram 5.

7. User can return from organization / educational institution to the network screen by clicking the back button on top left side of the detailed profile view.
8. Detailed profile view of an example organization (i.e. Apple) would encompass two semi-circles specified to past and current employees. If user wishes to communicate with either past / current employee, s/he can click on the employee's circle and a menu would pop up with three communication options (LinkedIn, phone number and email). (Diagram 6)

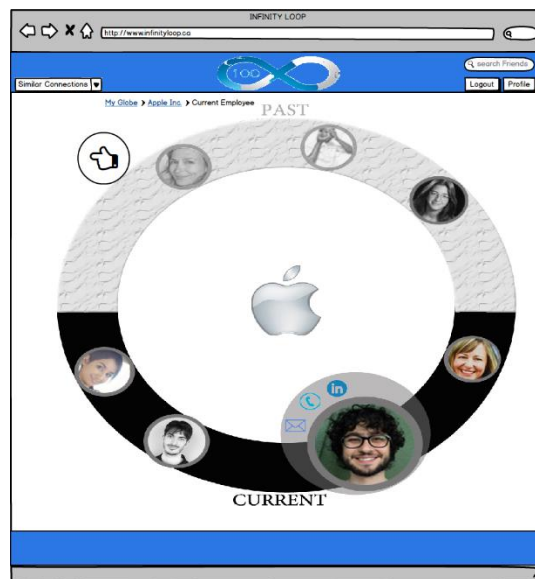


Diagram 6.

Initial screen is identified as “My Globe” since it captures the world map with owner’s spot (yellow star), friends’ (big circles) and friends of friends’ (smaller circles).

Orange arrow pic on top of the globe map enables the user to rotate the globe to see other connections across the world.

Evaluation Method

Our design was evaluated using a Heuristic evaluation. The participants performed a series of task and were asked to rate their experience using a Likert Scale per each of the ten heuristics. Three male participants (one 27 year old, two 20 year olds) ranging in nationalities from Canadian, Sri Lankan to Mexican took part in the evaluation. One of the participants was a computer science major and was considered an expert level user.

For each of the three design features the participant was asked to perform two separate tasks. The tasks are as follows:

Feature 1:

- Task A – Navigate from the main network visualization to a friend’s detailed profile.
- Task B – Now navigate from the detailed profile back to the network visualization.

Feature 2:

- Task A – Display connections that have a similar education as yourself.
- Task B – How do you view a detailed profile of a similar connection?

Feature 3:

- Task A – Navigate to Apple’s detailed organization profile.
- Task B – Now communicate via the “phone” with a past employee of Apple.

Below are the ten heuristics that were evaluated by our participants

Visibility of system status

The system should always keep users informed about what is going on, through appropriate feedback within reasonable time.

Match between system and the real world

The system should speak the users' language, with words, phrases and concepts familiar to the user, rather than system-oriented terms. Follow real-world conventions, making information appear in a natural and logical order.

User control and freedom

Users often choose system functions by mistake and will need a clearly marked "emergency exit" to leave the unwanted state without having to go through an extended dialogue. Support undo and redo.

Consistency and standards

Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform conventions.

Error prevention

Even better than good error messages is a careful design which prevents a problem from occurring in the first place. Either eliminate error-prone conditions or check for them and present users with a confirmation option before they commit to the action.

Recognition rather than recall

Minimize the user's memory load by making objects, actions, and options visible. The user should not have to remember information from one part of the dialogue to another. Instructions for use of the system should be visible or easily retrievable whenever appropriate.

Flexibility and efficiency of use

Accelerators -- unseen by the novice user -- may often speed up the interaction for the expert user such that the system can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.

Aesthetic and minimalist design

Dialogues should not contain information which is irrelevant or rarely needed. Every extra unit of information in a dialogue competes with the relevant units of information and diminishes their relative visibility.

Help users recognize, diagnose, and recover from errors

Error messages should be expressed in plain language (no codes), precisely indicate the problem, and constructively suggest a solution.

Help and documentation

Even though it is better if the system can be used without documentation, it may be necessary to provide help and documentation. Any such information should be easy to search, focused on the user's task, list concrete steps to be carried out, and not be too large.

Results

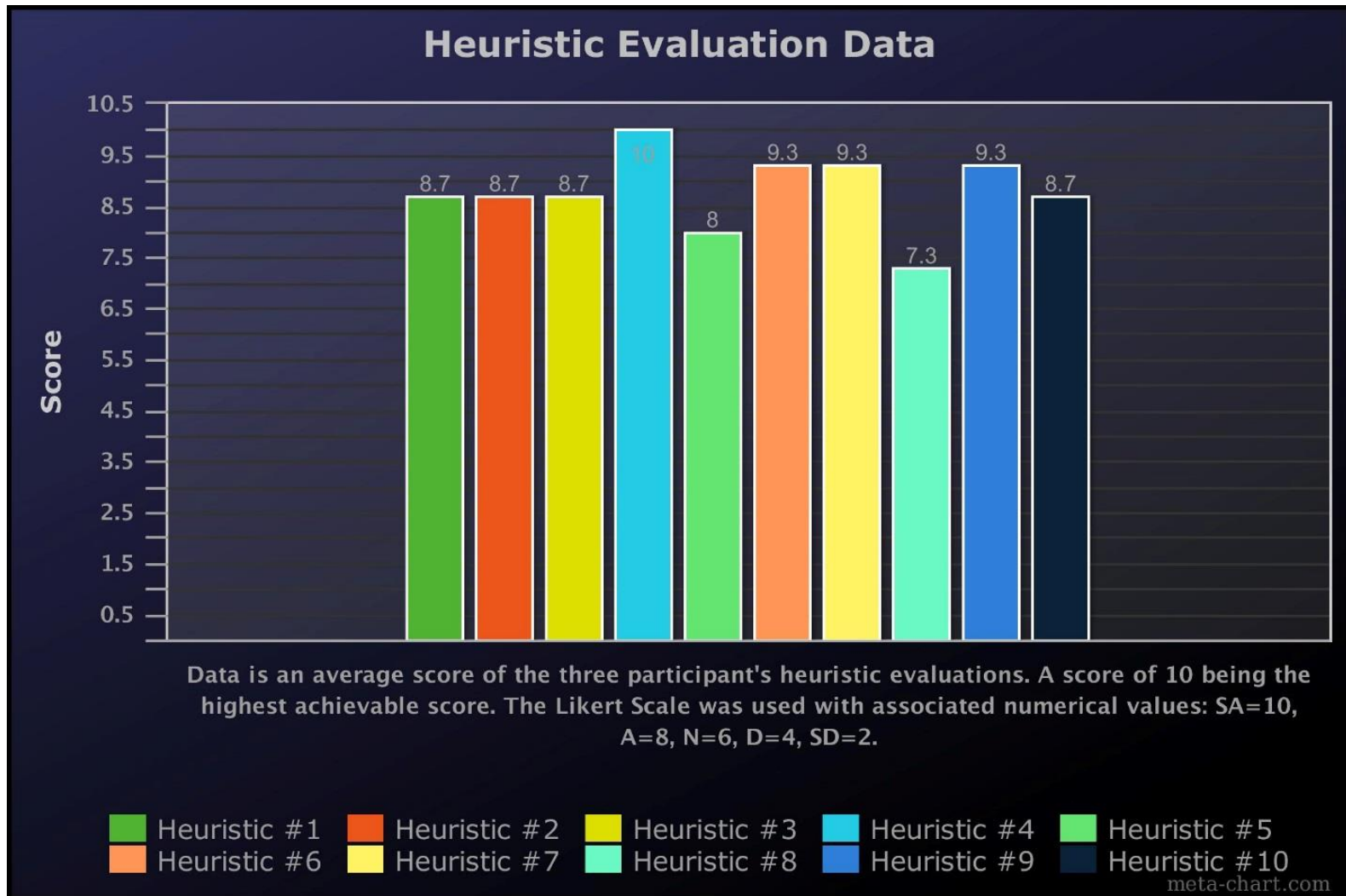


Diagram 7.

Diagram 7 displays the results of the heuristic evaluations. The scores are an average of all three participants' individual scores. Heuristic #4 (consistency and standards) achieved the highest possible score of 10 while heuristic #8 (aesthetics and minimalist design) was the lowest scoring heuristic with 7.3. A Likert scale was used with associated numerical values to determine scores. If a participant Strongly Agreed with a heuristic it was awarded ten point. If the participant Agreed with the heuristic it was awarded eight points. For being neutral about a heuristic it received six points. For Disagreeing or Strongly Disagreeing the heuristic received four and two points respectively. The total score for each heuristic was added up and divided by three to equate the averages.

Major Design Issue

- One major design flaw was determined during the evaluations. Whilst performing Task A in Feature 3 (Navigate to Apple's detailed organization profile) the participants commented that it was unclear on how to display the organizations on the network. The toggle switches in the top right were not intuitive and weren't easily recognizable as buttons to display organizations or educational institutes.



Diagram 4.

- A potential Major design flaw is how would the network visualization look with a couple hundred connections? The participants felt like it could potentially be very cluttered.

Minor Design Issue

- Wasn't easy to see the "Past" and "Current" employees title while in an organization's detailed profile page. (Diagram 5.)
- The colour coding didn't really help for displaying similar connections but was still clear. (Diagram 1)

Participant's Notes and Comments

- "The breadcrumbs on the top was very helpful for showing where I was and how to get back to the home page or an intermediate page".

- “I liked the design. It was simple and easy to navigate. How would it look with if there were a couple hundred connections?”.
- “Breadcrumbs do a good job”.
- “Maybe use a briefcase to signify employment”.
- “Display of connections has potential for a lot of clutter”.

Conclusion

Strengths

- The participants found the bread crumbs very useful.
- Navigation was straightforward.
- The drop down menu for similar connections was easy to use and effective.
- Having people placed where they live in the world on the network visualization was a neat idea.

Weaknesses

- The function and meaning of the icons in the toggle switches in Diagram 4 was unclear.
- The design has the potential to be cluttered with many connections.
- Sometimes the user didn’t recognize the colour coding.

Improvements

- The toggle switches’ icons could be changed to a symbol that is more easily recognisable for example changing the “phone” symbol representing organizations could be changed for a “briefcase”.
- The toggle switches can also be labeled so the user understands their function as well as appearing in all screens to be more consistent.
- As for the clutter issue a zoom-in function could be added to easily navigate crowded areas of one’s network
- Make titles and labels stand out more such as Diagram 5 where “Past” and “Current” could be placed inside the circle.

EVALUATION REPORT

Infinity Loop

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