

Florida Voyage Companions

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1. Interviewing Clients

1.1 Description of Clients

We interviewed 7 students namely Rishabh, Anip, Richa, Aditya, Surbhi, Aishwarya and Tanya. They were all aged between 20 to 23 years from India and looking forward to plan something to do in their vacations. They are all senior certificate program students who came in a month back and are here for only 5 months in Gainesville. We chose them as they are here for a short duration, their preferences and budget would be different from the other students who have many vacations to plan many trips. Yes, they have experience with the interface that helped them to make a successful trip.

1.2 Discussion of Interview Questions and Answers

To set the mood, we began our discussion with asking them about how their day went and are they enjoying here in Gainesville. Then we made them familiar to what kind of website we are looking to design and we need their inputs to get a better idea. Gradually, we moved to generic to specific questions to get a better picture. Few of the relevant questions are as follows:

A) How important is it for you to travel with a group/ person of similar interests?

We got mixed reactions for this one, some really wanted to be with people with similar interests so as to gel in well and visit places of their own kind. Others wanted to explore different places so people with different interests could help them know better.

B) Are you comfortable traveling with strangers with same interests?

Mostly all of them were not comfortable with strangers and wanted to travel with friends as it would be more fun. Thus, we are motivated to connect only Facebook friends

D) If someone has a variant budget as of yours, so to what extent it matters to you?

All of them wanted to travel with someone who had a similar budget and felt strongly about it as they said it was easier to decide hotels, eating places and places to visit.

E) To what level does the lodging requirement of yours should match with that of others?

For girls safety was their first priority and boys wanted a cheap lodging place. Girls were willing to spend more on lodging than boys. They all agreed that a middle ground between cost and safety can be achieved to accommodate everyone.

F) Do the food preferences of others matter to you? If you are a vegetarian, does a person having chicken/ beef bother you?

Yes, few vegetarians could not stand the smell of the meat so they do not like a non vegetarian person to tag along. Others were fine with whatever the other person wants to have.

G) Does it matter that the persons traveling with you should showcase a similar level of physical activity?

Interviewee preferred to hang out with similar set of people because in that case they were in a better position to choose for a destination, for instance trekking can't be a fit with one who just wish to chill out near beach.

1.3 Pressing User Issues

The one thing we realised after the focus group was that everyone wanted a traveller who they know already as they are more comfortable and a person with whom they share similar interests as they are more compatible with them. So, we are just letting people connect to their Facebook friends. Earlier we were planning to include all the people registered to have access to everyone's' profile.

Another thing, now that we have the responses from our focus group we can apply the correct weights to each factor when analysing profiles using weighted average method.

2. The Current Interface

2.1 Description of the Interface

We came across the following interfaces that help people to connect to travel together:

A) Backpackr: It is a mobile application available for iOS and Android. It helps people to travel and connect with other like-minded travelers across the globe. One(pro prospective traveller) has to make an account with the app and then it let's you interact and chat with other people.

B) CouchSurfing: It is a website that connects you with locals and travelers and gives out authentic reviews of the place. You have to sign up through email or Facebook and can register your account. A local member is assigned to you who guides you through places and events.

2.2 Existing Problems with the Interface

While signing up for BackPackr, we faced an issue adding our email id. It does not let you make changes in your profile like you can not update your profile picture. It's not an intuitive app as we could not figure out how to proceed. So, no one wants to use an app that takes more of our time. Users want to meet the people of similar interests in the easiest, quickest way possible.

The worst thing about TripTogether is that you can not delete your account. It seemed there are lot of fake accounts and thus creating a safety concern for the users. It looks like more of a dating site than a travel site, people spam you with messages asking to travel together without acknowledging the preferences. As safety is the users' main priority we can not tolerate such fake accounts.

2.3 Existing Solutions

Backpackr app spams you with many irrelevant notifications. While signing up for Backpackr, we faced an issue adding our email id. It's not an intuitive app as we could not figure out how to proceed and it crashes often. The good thing about it is that it has many events organized for the users and they are well highlighted in the app so they can know about it.

TripTogether has a great social presence and claims to have catered to 300,000 travelers in 11,000 cities. The worst thing about it is that you can not delete your account. It seemed there are lot of fake accounts and thus creating a safety concern for the users. To connect with people you have to add credits to your account.

CouchSurfing is really well designed site with a very intuitive interface. It has many cities to explore. The good thing is it connects you with locals that know the place really well and serve as guest hence its limited to meeting new locales only. It does not notify before charging you for the paid services. It does not work on Safari on iPhone but works on Mac.

2.4 HCI Guideline to Address the Problems

- **Strive for Consistency:** Prospective tourists should experience a smooth transition from the question menu to the perfect match. This guideline is used to avoid any complex transitions of web page.
- **Offer Informative Feedback:** This guideline is being used to make a pop up icon for every clicked button. This is incorporated to make the user informed of every minor and major actions,
- **Permit easy reversal of Actions:** If while answering questions, user wish to change a response of previous question, he/she will be at ease with this guideline.
- **Offer Simple Error Handling:** If a user tries to submit the results without answering all questions, an internal error is expected. Thus to avoid that an awkward situation, web page will be refreshed & a request message is made to prospective tourist to complete all entries first.
- **Support internal locus of Control:** This guideline motivated us that users should be the drivers of a website instead of the responses. We'll highlight the best possible match so that the users are motivated to come back again for better user experience and meeting the right people.

3. Research

Arif, Abu Shamim Mohammad, Jia Tina Du and Ivan Lee, *Towards a Model of Collaborative Information Retrieval in Tourism*, Proceedings of the 4th Information Interaction in Context Symposium, ACM, New York, 2012, pp. 258- 261.

This paper focuses on the development of 'Collaborative Information Retrieval' model for tourists. The authors have provided some questionnaires which gives insight about what the tourists or people new to a place search for the first time. The participants were supposed to put the keywords provided according to the priority. After the experiments, the keywords in the priority order were 'Place of Interest', 'Visa', 'Travel route', 'Hotel', 'Weather', 'Food'.

Thus, from here we can extract that similar place of interest is the most important thing that a person might look when they go to a new and unfamiliar place. So while building our questionnaires, we can give higher weight to the question including the place instead of the question including weather or food. In nutshell, this paper helps in giving the ranking of the weighted average questions.

Subrahmanyama, Kaveri, Stephanie M. Reich, Natalia Waechter and Guadalupe Espinozab, "Online and offline social networks: Use of social networking sites by emerging adults": *Journal of Applied Developmental Psychology*, Vol. 29 Issue 6, November 2008 , pp. 420-433.

This paper discusses about the frequency of usage of internet for communication. This study also compares the frequency of online social networks over offline social networks. Moreover, the

survey showed that the ones participated frequently use social to ‘connect and reconnect’ with their peers. The older age people are also though less uses online social networks to connect.

Thus, this study help us in deciding whether we make an app or a website which can be either offline or online. So we can choose upon an online website for our design. This will be feasible for the youngsters as well as the old age people for they are less comfortable using an application.

Ellison, Nicole B, Charles Steinfield and Cliff Lampe, “The Benefits of Facebook “Friends:” Social Capital and College Students’ Use of Online Social Network Sites”: *Journal of Computer- Meditated Communication*, Vol. 12, Issue 4, July 2007, pp. 1143–1168

This paper refers to the study performed to examine the linkage between a user and the use of Facebook along with its effects on Social Capital. The study found that there is high connection between Facebook usage and user’s connection. One of the experiments also suggested that Facebook can help make new friends. Moreover the study also points out how a social platform can help an individual to overcome ‘low self-esteem’ and ‘low life satisfaction’.

Thus, with the help of this study we figured out that the platform to be chosen is of Facebook. As stated before during the focus group, we found out that people were reluctant to go with a complete stranger. So when we try to match up then priority can be given to the Facebook friend of the user.

Lai, Linda S. L. and Efraim Turban “Groups Formation and Operations in the Web 2.0 Environment and Social Networks”: *Group Decision and Negotiation Springer Science*, September 2008, Vol 17, Issue 5, pp 387–402

This paper proposes a triad relation model of ‘Technology-People-Community’ for overall betterment of the society and the interaction between people. The results show that there is a desire for trust amongst the people using social networks. Moreover it also points out how ‘online social groups’ are sustainable. It also suggests that how group formation is important in the community and can be done via social network.

Thus, with the help of this we can state that usage of questions like trust factors and groups in our questionnaire can be helpful for the user. The privacy about the user though will be maintained. From here we can conclude that the questionnaire best matches can be from the similar group joined by people on Facebook.

Bakshi, Eytan, Itama Rosen, Cameron Marlo and LadaAdamic, *The Role of Social Networks in Information Diffusion*, Proceedings of the 21st international conference on World Wide Web, ACM France, April 2012, pp. 519-528

A paper by the Facebook officials itself, they focus on how information is diffused online with the help of social networks. This study suggests that though the strong ties spread the information, the weak ties sometimes dominate in particular field for spreading the information. The authors’ works have resulted in the conclusion that social networks not only influence user

but also reflect their behavior via activities. The vast information is spread most effectively via a social network.

Thus, from here we conclude that with the help of user's activities we may find some similar interests, similar places and prioritize according to that. For example we can choose same college for people going for an outing and give more weightage to the college. The information though have to be secured but by properly managing we can improve our questionnaires and matching.

4. Proposed Design

4.1 Description of Proposed Solutions

The idea of designing a meeting app for prospective tourist is enriched by conducting a focal group interview and by research paper analysis.. We observed that interviewee are reluctant to find a group with strangers but are ready to group with known persons. Thus the idea of making a group match with facebook friends seem perfectly fit because there are hundreds of known people with whom people don't interact daily but can be comfortable in enjoying a voyage. Secondly, above mentioned research paper made us arrive to a conclusion that how a similar set of people has a wide variety of attributes which enables to call it similar. This conclusion enlightened us with this challenge of broad scope.

4.2 Description of Proposed Design

The proposed design aims to make a web page of prospective tourist travellers. The very first insight will carry a login page which lets you access the interface. It will then direct to fill an interest choice form. It will be carrying five or more most concerned questions regarding group travelling. The sorting of questions priority has been done on the results of the conducted interview. This questionnaire will ask about gender, destination, budget, lodging, tastes etc in a multiple choice form. We are assuming that all the users are interconnected on facebook. Now in the backhand, the system will pick the recorded results & through facebook login will perform the matching of the requirements. The benefit of using facebook as a gateway is that people connected on fb are not strangers. We are motivated to use the weighted average algorithm to calculate the raw score and give a priority match. We already have designated priority to the asked questions on behalf of focal group results. Throwing some light on its backhand working, we will assign scores as 4,3,2,1 to answer choices A,B,C,D for one particular question. Now suppose we have multiple users who answered this question. User P's scores will be added individually to user Q,R,S. Now the highest score match will be the suitable match for this question. This method will be done for every question. Now, we will sort the resultant matches in order of question priority again given them a weightage. On multiplying the resultant weight with individual matches and then adding all the scores of user Q, R, S will qualify for the perfect match for a travel group partner.

4.3 Technical Description and Logistics

Our hardware requirements include a laptop or a macbook with a compatible browser. Software Requirements, we plan to use CSS, html, Python to create the webpages for our interface as everybody has a hands on experience on these languages. Secondly, to implement the backhand calculations of matching we'll prefer coding in C++ and if required, in python as well. There is a

risk involved in choosing the programming language for backhand work, reason being all the members have an expertise in different languages. The healthy discussions with the faculty and TA motivated us to restrict our domain to webpage only.

Product Manager: Sakshi Dubey

She will ask the prospective tourists requirements and ensures if these requirements are satisfied by the interface.

Scrum Master: Richa Sikri

She has a major responsibility to keep a check on development process and will ensure if planned features gets executed well in time.

User Studies/Product Evaluation: Anushka Gupta

She will be a key player in keeping an eye over quality of the study design and will ensure its compatibility with analyzed data.

5. Design Sketch

As stated in 4.2 we will use Weighted Average Method to predict the best match for a group partner. The following mathematical notations will be used.

Step1: $Result1 = \max[P(score1)+Q(score1), P(score1)+R(score1), P(score1)+S(score1)]$

This step is repeated for all questions.

Step2: $Result2 = W(Q_i)$

Give weightage from 5 to 1 to every question according to priority.

Step3: $Result3 = [Result1(i) * W(Q_i)]$

Where i is question no. here

Step4: $Result4 = \text{Sigma}[Result3(j)]$

Where j is the matching User with whom user P is matched here(Q, R,S etc)

Step 5: $Result5 = \text{Max} [Result4(Q), Result4(R), Result4(S)]$

The max score will be the best group mate match. We can also sort all matches in descending order.

This is a detailed version of how the implementation of matching algorithm will be carried out in backhand. Following are the design we are planning to implement for the interface:



Appendix

To set the mood, we began our discussion with asking them about how their day went and are they enjoying here in Gainesville. We talked about their life in here. Then we made them familiar to what kind of website we are looking to design and we need their inputs to get a better idea. Gradually, we moved to generic to specific questions to get a better picture. Following are the notes from our interview:

a) How is your life going in here? Enjoying here at Gainesville?

Everyone was happy here to be independent and doing all their chores on their own. Anip was shy and was not really saying anything, he was just nodding in between so we made him share his first day's experience at University Of florida so that he gets comfortable with all. It did the trick well and he spoke confidently in the successive rounds of questions.

b) Are you looking forward to a vacation in Florida?

Everyone was excited to explore and utilize their time fruitfully having fun with friends. Rishabh and Richa suggested some places like Orlando and St Augustine too. They had already checked few places on Google.

c) How important is it for you to travel with a group/ person of similar interests?

We got mixed reactions for this one, some really wanted to be with people with similar interests so as to gel in well and visit places of their own kind. Others wanted to explore different places so people with different interests could help them know better. Surbhi, Anip, Richa, Tanya and Aishwarya said in a unison to hangout with people with similar interests. Rishabh on the other hand argued that its better to meet people with varied interests. Aditya was comfortable with anything at all as long as he is not sitting at home.

d) Are you comfortable traveling with strangers with same interests?

Mostly all of them were not comfortable with strangers and wanted to travel with friends as it would be more fun. Everyone said that it's safer to travel with some known people as there are here for just 6 months so they don't know the place or roads that well. Thus, we are motivated to connect only Facebook friends.

e) If someone has a variant budget as of yours, so to what extent it matters to you?

All of them wanted to travel with someone who had a similar budget and felt strongly about it as they said it was easier to decide hotels, eating places and places to visit. This was no brainer, everyone wanted to be with someone whose budget is compatible for better understanding.

f) To what level does the lodging requirement of yours should match with that of others?

For girls safety was their first priority and boys wanted a cheap lodging place. Girls were willing to spend more on lodging than boys. They all agreed that a middle ground between cost and safety can be achieved to accommodate everyone.

g) Do the food preferences of others matter to you? If you are a vegetarian, does a person having chicken/ beef bother you?

Yes, few vegetarians could not stand the smell of the meat so they do not like a non vegetarian person to tag along. Others were fine with whatever the other person wants to have.

h) Does it matter that the persons traveling with you should showcase a similar level of physical activity?

Interviewee preferred to hang out with similar set of people because in that case they were in a better position to choose for a destination, for instance trekking can't be a fit with one who just wish to chill out near beach. Rishabh and Aditya were open to anything at all but other preferred to be with someone at their own pace.

i) Would you like to have a website offering to interact with similar taste of prospective travelers?

This youth was really zealous about the idea because one of them pointed out that he wanted to plan out something but didn't know someone who would like to go to the same place. They embraced us with their innovative ideas. They were keen to make this happen and agreed to review our work and provide feedback whenever necessary.

We ended on a high note with everyone excited about their plans and we got candies for hence, more of excitement. It was a great way to know and talk to people and get to know how differently everyone thinks. Not everyone is the same in the group, some are overly enthusiastic to talk, others were reluctant to speak up. Gradually each member finds their place and start opening up for the better.