

Health VIS.

A Visualization for Personal Fitness

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Process book

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Overview and Motivation:

The Objective and Motivation of this project is to allow people to know their healthy status in the most direct ways. Normally we have all sorts of different apps that provide you with all kinds of data and visualizations, but most of them just show numbers and users may not completely understand what these numbers mean. Although some apps will give you a hint of what is the threshold and allow you to track your history, such as Nike+ or Lose It!, they are hard to be understood. For Nike+, the fancy expression will sometimes confuse the user, hampering him to really understand how much exercise he really needs. Instead, he may be encouraged to exercise more than he is comfortable with. For Lose It!, the numbers lack an efficient way to visualize. Sometimes the user is consuming more calories than he should have. But he may fail to realize how much the difference in number matters. Furthermore, there is few visualization that takes consideration of both food and exercise.

We always heard people saying we need to have a good balance of food and exercise. In our project we will allow people to see this ratio and keep track of himself everyday that how is he keep himself healthy.

Questions(User Experience):

This is a visualization for individuals who wants to track their everyday healthiness. Most people they are not experts. Therefore, what they need is a first glance of the result, that how they are doing. After seeing the conclusion he then have the opportunity to browse into detail.

Also, this is a personal data expression, People will be able to input data inside and we will have to save them. calculate the numbers and will provide the result.

It is also important to have a food data to look at. Users will have no idea how much calorie of the food, they only know the name of the food. When they are using this they will just input the name of the food and the system will calculate calorie for them.

If possible, hack into Nike+ to extract the data of people's everyday exercise. If not, track your own data and manually type them into the personal data. Make other people's data so we have comparison.

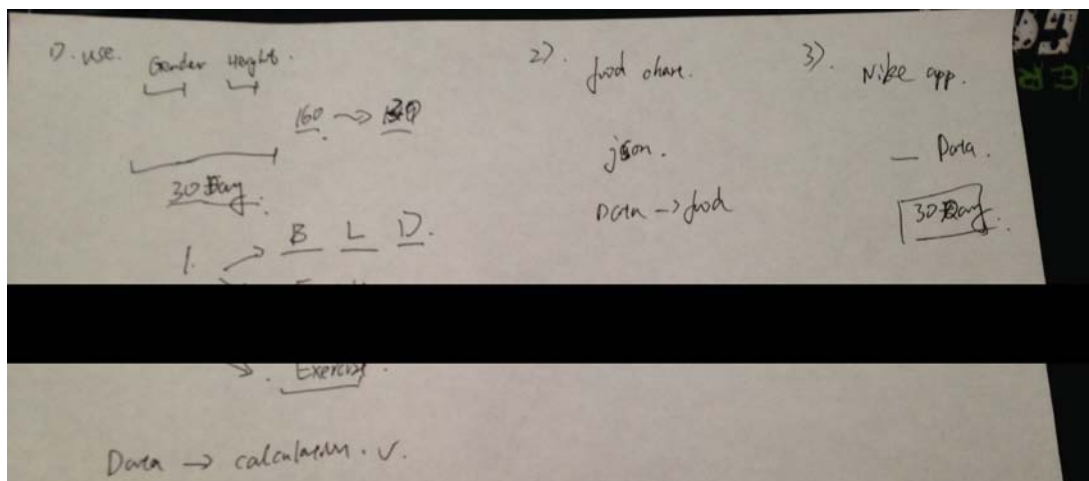
Date. 03/28/2014

Data:

There are several data we need.

1. calculation. Based on each people's different body status (height, weight, gender...) Their standard health thread hold should be different, Based on their body parameter, we should have some formula to calculate out our first set of data
2. food chart. Find a food database that each food correspond with a number of calorie value. To make the problem simpler, we don't want to deal with quantity. single- serve will do the job.
3. Personal data. Use Nike+ to accumulate your personal exercise data.

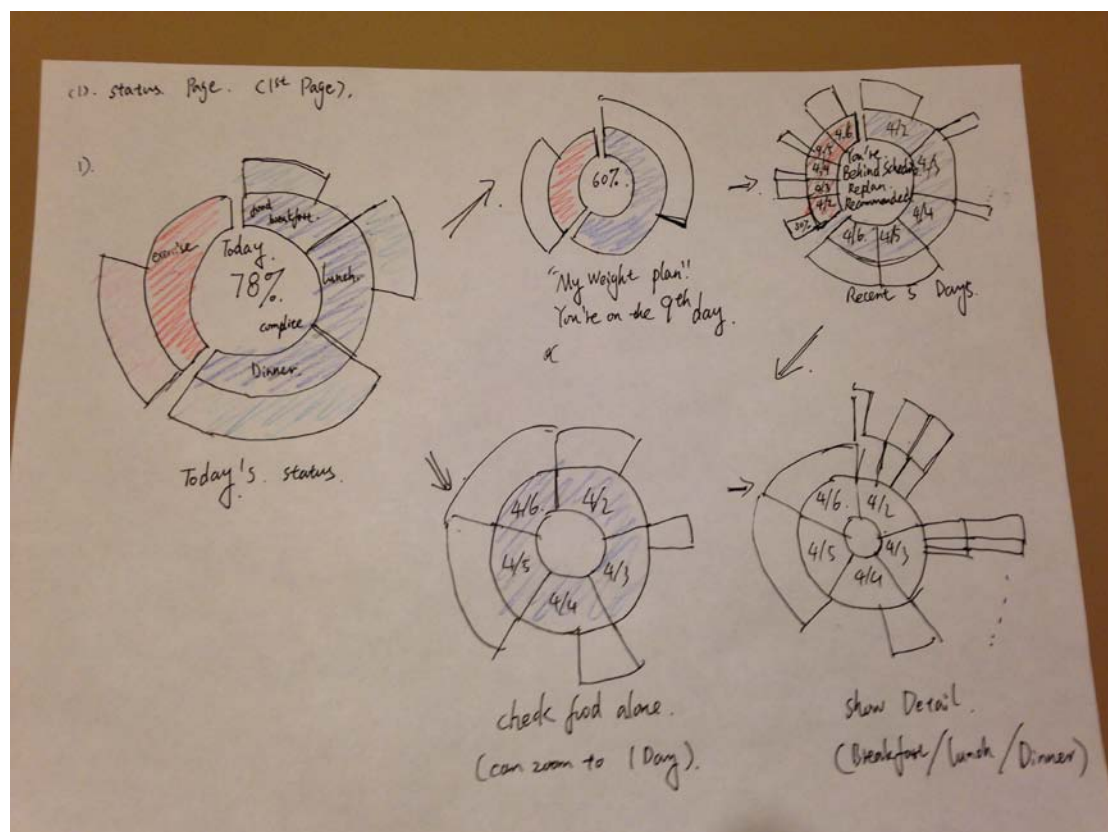
Make your friends data.



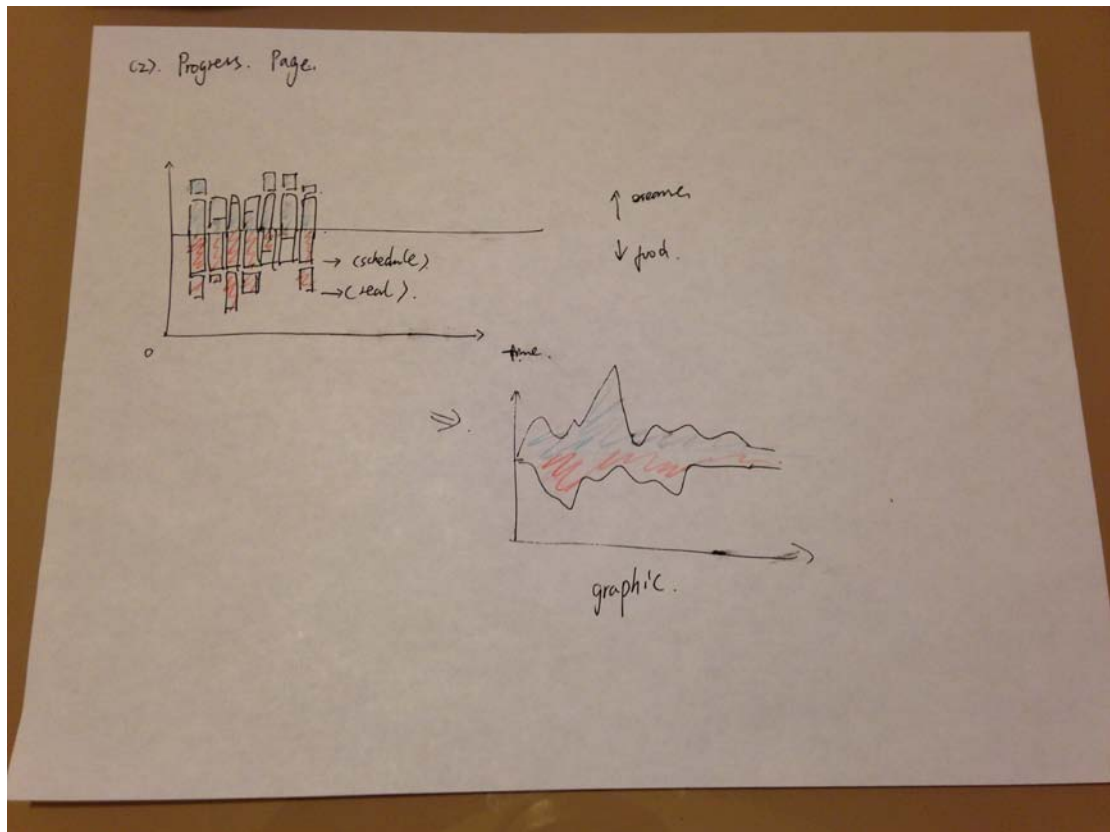
Visualization :

1. a donut chart to show how much you have accomplish every day. You have a number for planned exercise and food, and a number of actual exercise and food. Compare them you will have a complision percentage. This chart can zoom in into how much for breakfast, lunch and dinner. This chart can also zoom out for an overview of your plan.

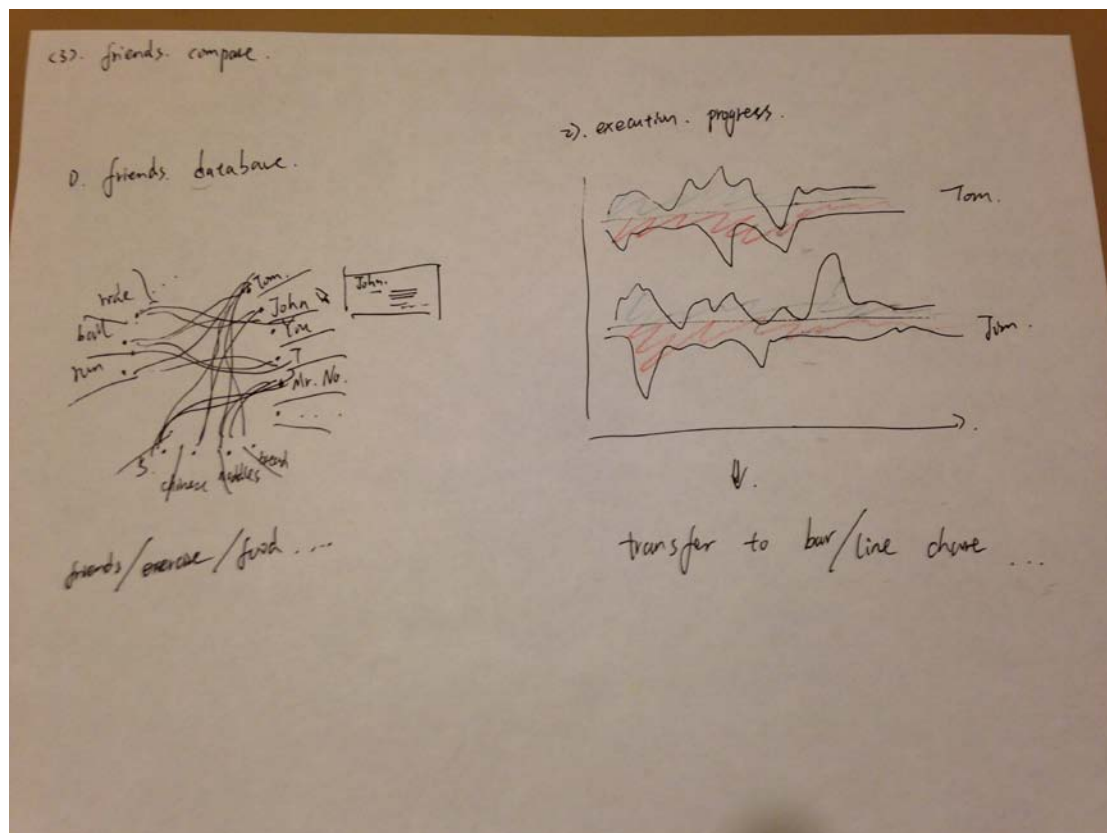
The reason to choose today's data visualization to the users is because this is the thing they care about most.



2. Bar chart and variation of bar chart is good for keep history of your plan, allowing you to brush the data to see and compare your own data within a certain time.



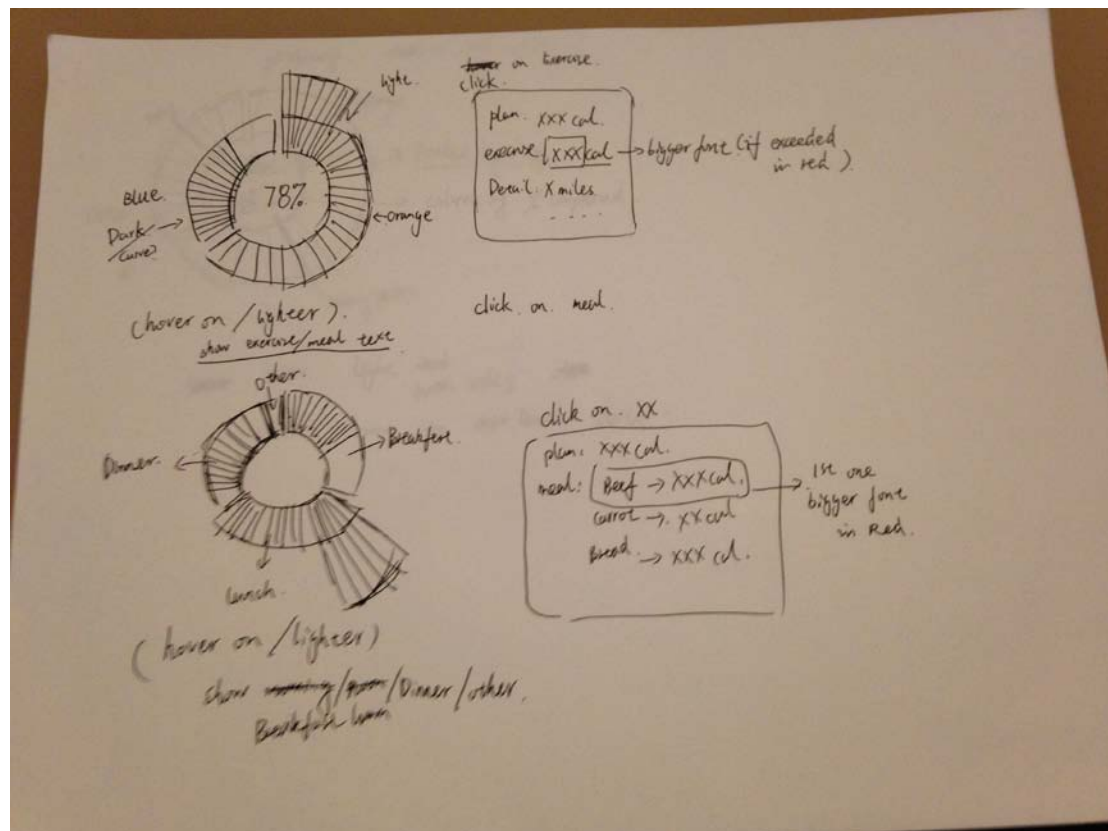
3. Friend comparison. You can browse your friends data to see how much exercise they are doing and what kind of food they are eating. a connection (tension) graphic will show the relation. It is also possible to compare them in a bar chart.



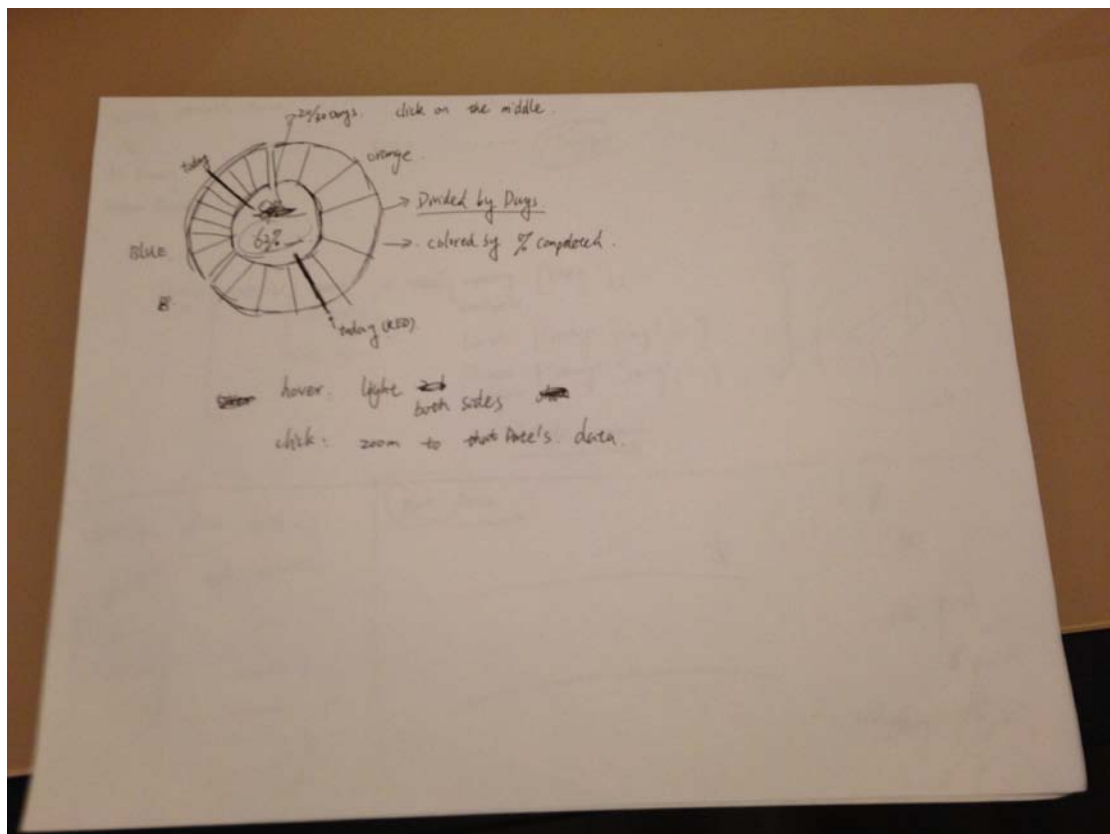
Date. 04/02/2014

Visualization :

Since we are comparing planned data and real data, We can make the donut chart and a colored ring indicating the real data. when hover will be highlighted. when clicked will show the detail in a txt box.

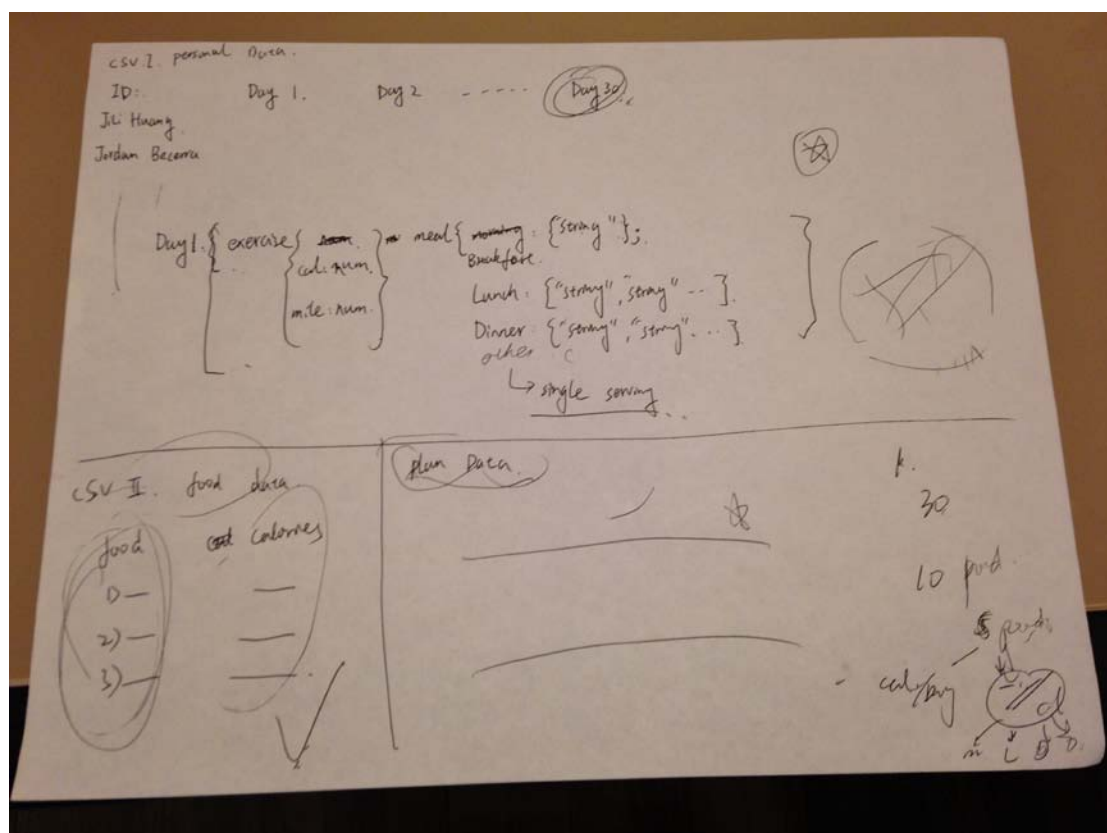


If you click in the center there will be a zoom out of the over view of the data. You can click on the ring part and show that date's data accordingly. Also, there will be indicators showing which date you are at the current moment.



Data (personal data) :

This is the data structure of personal data. We determine this is gonna be a 30 days plan. We have an ID of the person is name. They will have 30 children for 30 days. Each child has two items, exercise and food. For exercise there will be mile and calorie. For food there will be breakfast, lunch dinner and others. each of these nodes will have items that is from the food data csv. In order to make it work we should browse the food database to determine the value of the food strings (calorie of the food) before we put this into the main visualization code.



Date. 04/08/2014

Peer feedback:

1. The donut bar is less comprehensible than bar chart. This may be the case but there is something else. First, the center text will be a focus point if you are using donut. Second, the movement of zoom in and zoom out make more sense of showing details and overviews.

2. To compare plan and real data. There is a very good point that it is the ratio that matters. In terms of our project, it is showing whether the ratio expression falls in the right shape. The balance is the key of healthness.

3. UX sequence. First see today's conclusion, then have the opportunity to zoom into details or zoom out to overviews.