

# InfaCare

## Interactive prototype Report

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### **Problem and Solution Overview**

For millennia, pregnancy has posed a serious health risk to women and their families. The birth of modern medicine and technology in recent decades has made childbirth a much safer procedure. However, there is always room for growth, and we think that InfaCare is the logical next step for leveraging modern technology to help pregnant women to adjust to this monumental event in their life. The convenience, portability, and internet access capabilities of today's mobile devices can help women prevent and treat health problems arising from pregnancy. Our goal is to offer information that is pertinent to our users, but not so much of it that only a small portion of it is interesting and useful to a given woman at a given time. This results in an app with a bold, visually-oriented interface. Pregnancy is an experience full of growth, change, enrichment, and challenge both physically and psychologically. Thus, InfaCare strives to provide a welcoming space and facilitate communication between pregnancy women. InfaCare's revolutionary "community" feature allows women to access accurate crowdsourced pregnancy information on the fly -- and use this information to improve the quality of their dialogue with their healthcare providers.

### **Easy Task: Weight tracking**

You know tracking weight gain is important for both you and your baby's health so you want to enter the current week's weight and present your chart of weight changes to the doctor. This requires the participant to use the weight tracking portion of the app to enter in their current week's weight. Afterwards, the user must pull up the chart of their weight history and show it to their doctor.

### **Medium Task: Food selection**

Imagine that you are at the first week of pregnancy and this is the first time you have used Infacare. Find out which dairy products and vegetables you should eat during the 1st week of pregnancy.

This task involves the user finding information within the app about healthy foods to eat. They have to create a new account in order to access the main screen of the app. This task has them navigate to the "Suggestions" menu and find the dairy and vegetable categories to look up information about good foods to eat.

### **Hard Task: Use the community feature - create a favorited post and find information**

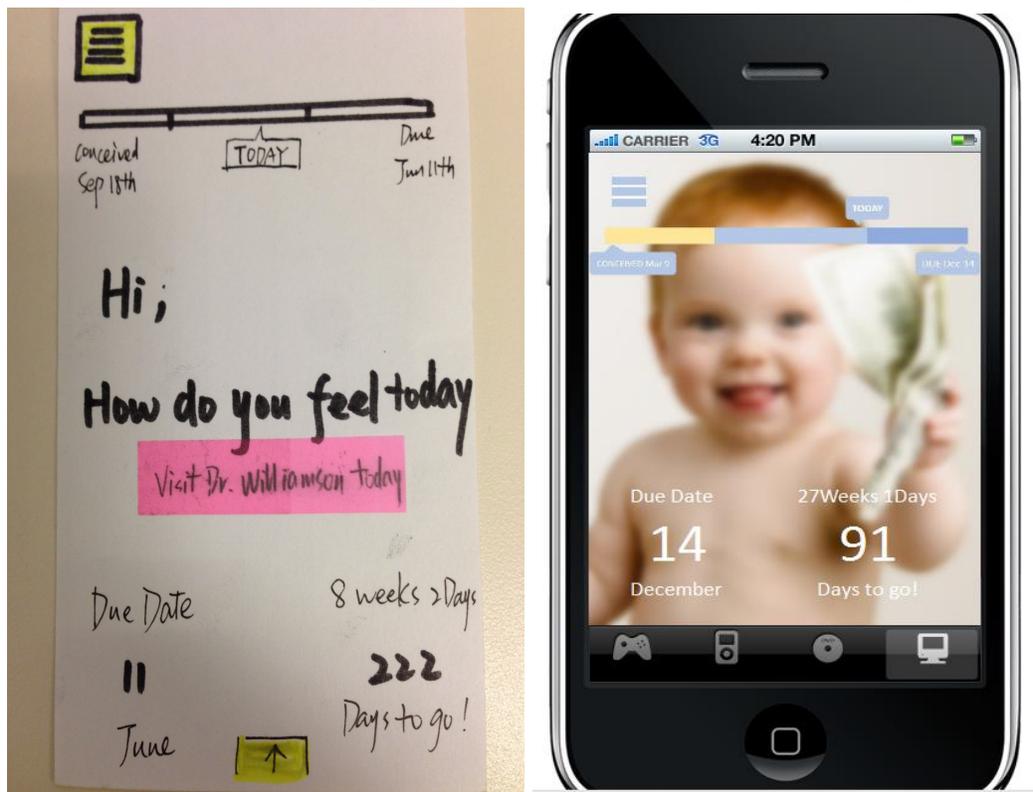
## about your latest symptom.

You experience an unusual pregnancy symptom. Use the community tool to determine how severe you think the problem is, and reply to a post describing your experiences. Favorite the post of another user who described similar problems and gave useful information about how to resolve it.

## Interface Revision Sketches

### Home page changes

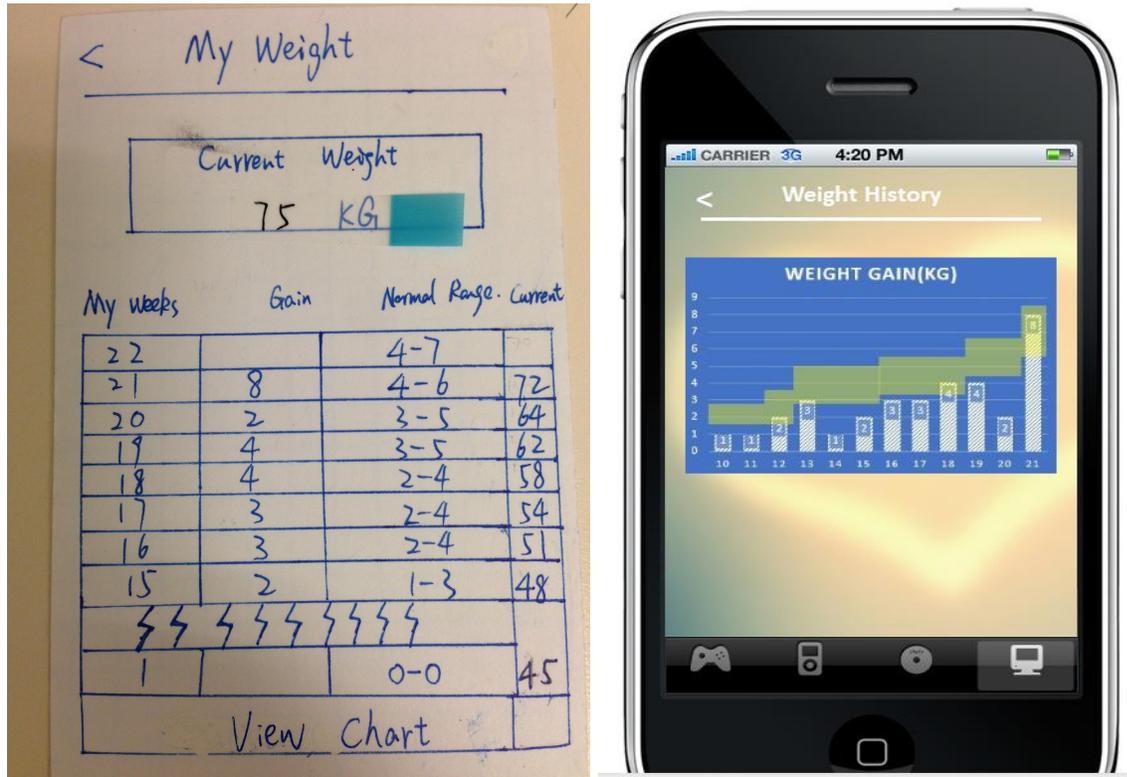
In the latest version of the interface, we got rid of the swipe design on the homepage and now display the main four functions on the home page. That way, users can get access to the functions immediately without interfering with the simple and clean interface appearance. According to the second round of contextual inquiry with a current pregnant women, the timeline is very important during pregnancy. Thus, we make the date counting down bold and obvious.



### Weight tracking changes

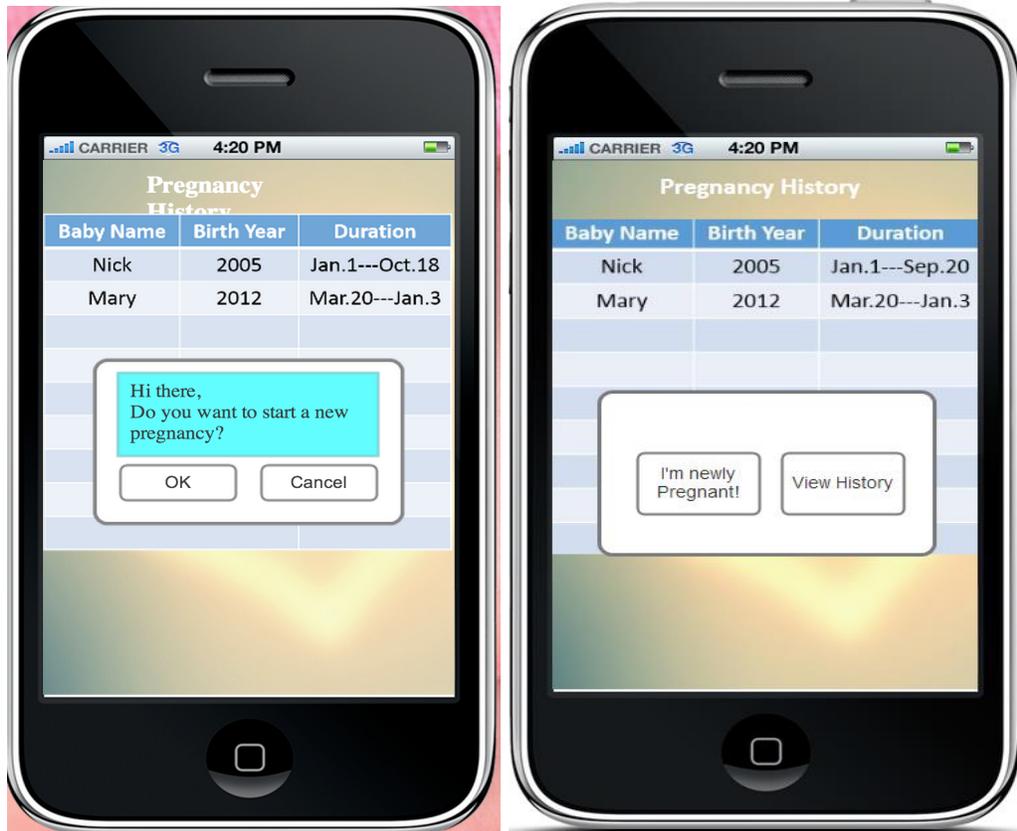
Our design started with a clumsy and dense table, meaning that users were required to click another button to see the chart of their weight gain. We eliminated this chart entirely, so that users would have immediate access to the most informative part of this function -- the bar graph. We also increased the size of the graph and made it possible for users to enter weight whenever they please (each measurement contributes to the appropriate weekly average).

Before, there was ambiguity about whether entering weight two times in a single week would accidentally create a measurement for the next week or not.



### Pregnancy record changes

In the first interactive prototype, we had a confusing interface for adding a new pregnancy. You can see that original interface below. "Ok" and "Cancel" failed to answer the yes/no question and it is unclear what happens if Cancel is clicked. We changed this pop-up screen to have just two simple and large buttons: "I'm newly pregnant" and "View History". These options make it clear what each button will do and eliminate our need to have a text box with a query.



### The community feature

We determined that our users would find a community/forum function useful. Thus, we implemented a completely new feature (named Community) that takes the place of the original symptoms function. In Community, we have a moderated forum that encourages discussion of concerns frequently associated with pregnancy. Users can solicit advice from others and offer information about their own experiences that would be helpful to other women in similar positions. We have retained a portion of the symptoms page in the former suggestions page, which we have renamed Advice (since talking about Symptom suggestions makes little sense). Advice contains our original material for diet and exercise and now also has a short list of the most expected symptoms. This means that our users are still enabled to make a quick determination about whether what they are experiencing is normal, allowing them to then make a decision about whether they want to discuss the problem with their doctor or on the forum. Our community recognizes the fact that many posters will have unique situations that do not apply to most others, or will simply not know what they are talking about. To relieve this difficulty, we have the ability to search for answers that are created by healthcare professionals. Additionally, we have a vote up/down feature that should filter out most low quality posts. Medical professionals get extra votes in this system.

### Tool Used

To implement the website, we used a Twitter Bootstrap base and a template called stylish portfolio from Start Bootstrap ([Link](#)). From there, we used Google Image Search to find backgrounds and a color picker to find hex codes good colors for our color scheme. The prototype was originally embedded into the site with an iframe, but a javascript element was pulling focus to the iframe and scrolling the page down when it loaded. To solve this we moved the prototype onto a second page and placed a link to it on the first. This was a major issue that impacted how the site looked, as we would much prefer that the prototype remains in its original place, but that is not possible. The pdfs were linked to from the website and thumbnails were generated using a 3rd party program.

The tool used to create our interactive prototype was Axure. It was able to serve us well for creating our basic prototype features, but also was annoying during the creation of various aspects of the interface. An example of this is that it is difficult to change buttons and alignments quickly.

### **Prototype Overview**

When one accesses the prototype for the first time, or when they are between pregnancies, the user is prompted to either view their history or create a new pregnancy record. Our implementation only continues if you decide to create a new pregnancy record. At this point, the app determines the likeliest due date by asking about the last period of the user. Completing this section brings the user to the home page. It features a newly-designed pregnancy progress bar and our four main functions now have their own buttons on the home screen.

Our interactive prototype retains the ability for users to track their appointments. Users enter the necessary information into the appropriate date and can enter notes that they want to recall for the appointment. There may also be notes in this section that were generated by the app due to a weight gain discrepancy.

### **Scenarios for 3 tasks**

Clicking on the weight function no longer brings users to a table but to a bar graph that displays the user's weight and the normal range of weight gain. If the weight levels fall outside of the accepted range, then the bar turns red. This means that the user may click on the bar in order to choose whether or not they would like to be reminded of this deviation at the next appointment on their calendar (if there is no such appointment, then the application will remember and automatically add the reminder to the next appointment, as soon as one is scheduled). We also allow users to use a pinch in order to zoom in and out. However, this hasn't been implemented in our interface yet.

The function previously called "Suggestions" has been renamed to "Advice". The reason for this is that symptom information has been included in this section, and it makes little sense to speak about symptom suggestions. The advice section is split by trimester, since that is the only pregnancy partition that ensures that the information offered in each section will be sufficiently

different. Our interface allows the user to select the second trimester, and upon doing so, they will be presented with three options: symptoms, diet, and exercise. The symptoms section gives a list of most expected symptoms and allows users to get cursory information about their issue. The diets section gives users a chance to read about recommended diets and informs them about how much of each food group they should be eating. Exercises is yet to be implemented.

Community is the main new result of our latest rounds of iteration. Users can find appropriate posts by clicking on a topic in the word cloud or by choosing a pre-set category at the bottom of the screen. Our interactive prototype allows users to click on the word cloud member "Morning Sickness" and doing so will take them to a list of posts about morning sickness. Users have the ability to reply to posts, favorite a post, and vote up or down on the post. The user then replies to a post about morning sickness and selects it as a favorite.

### **What was left out of the prototype**

The side function bar is consistent with most of the Iphone applications. Going through this part will not help users to better understand our tasks and design.

The exercise section is left out because the operation is very similar to diet section, and because there is no task related to it.

### **Storyboards of scenarios**

### **Interfaces for weight tracking task**

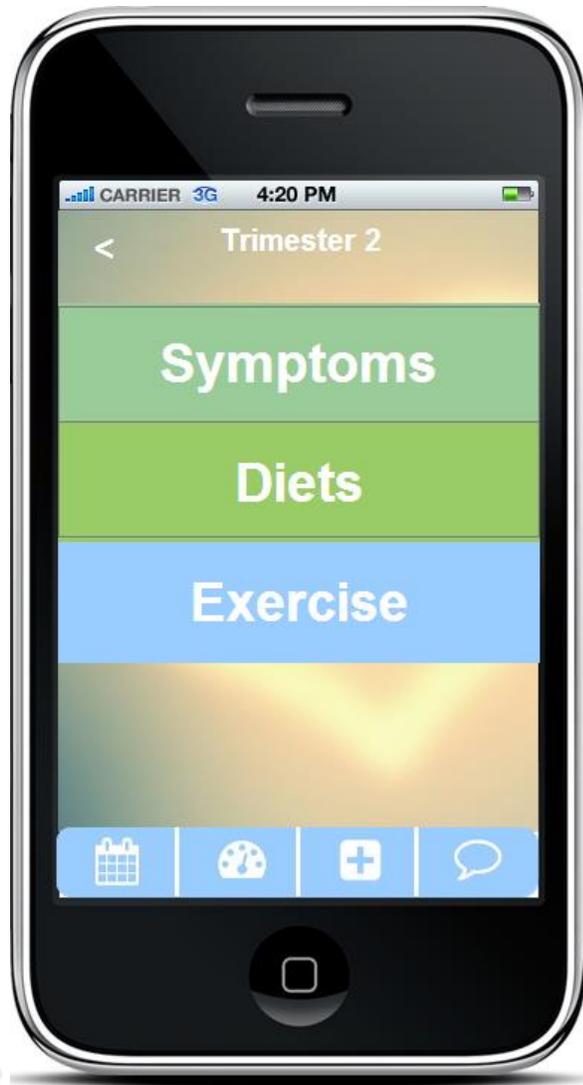
Clicking on the weight function displays the user's weight and the normal range of weight gain. If the weight levels fall outside of the accepted range, then the bar turns red.



**Interfaces for medium task: Food selection and new pregnancy record**

The app determines the likeliest due date by asking about the last period of the user. Completing this section brings the user to the home page. It features a newly-designed pregnancy progress bar and our four main functions now have their own buttons on the home screen. The diets section gives users a chance to read about recommended diets and informs them about how much of each food group they should be eating.





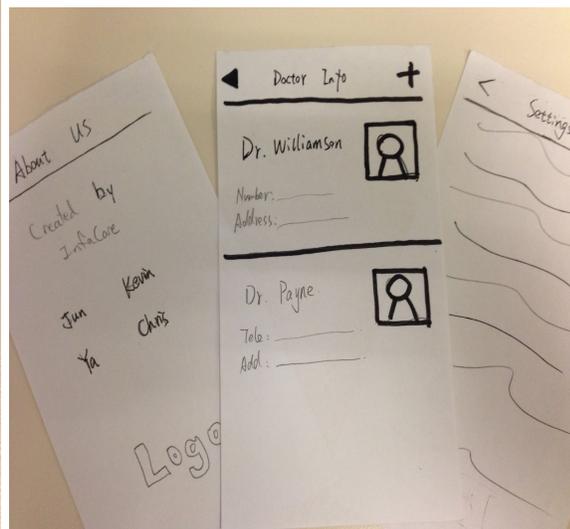
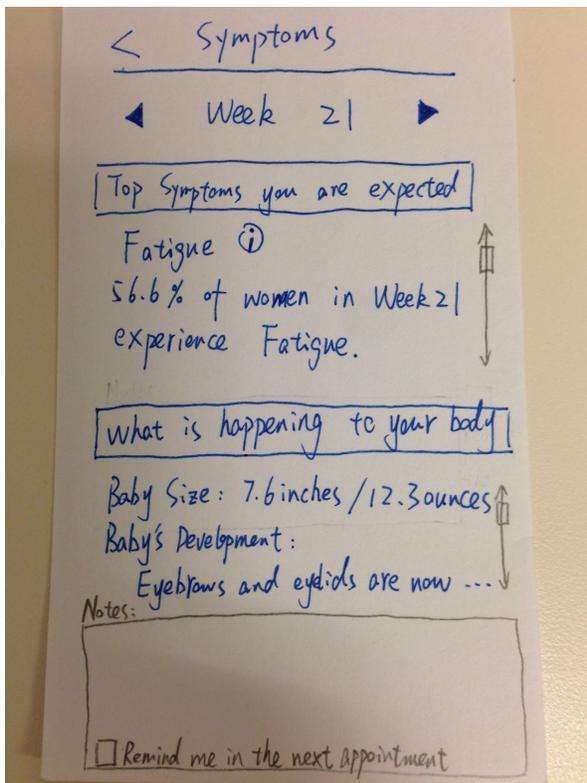
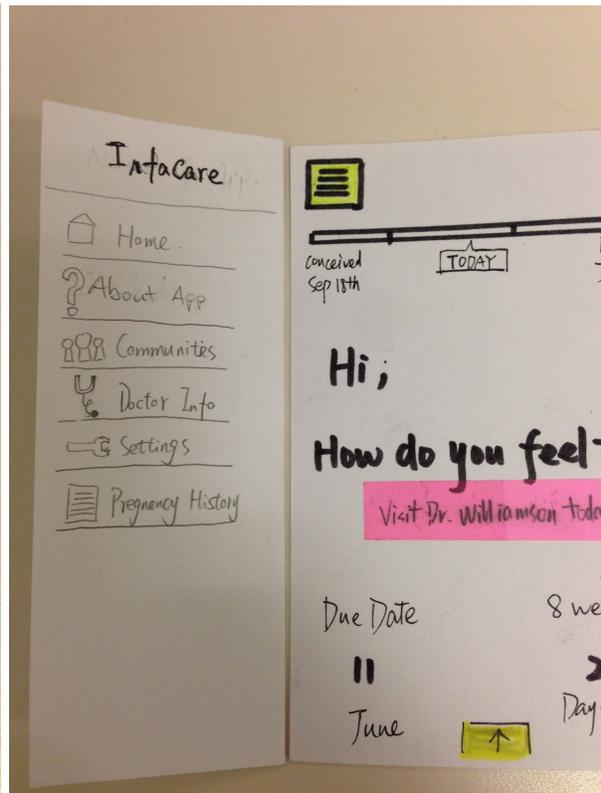
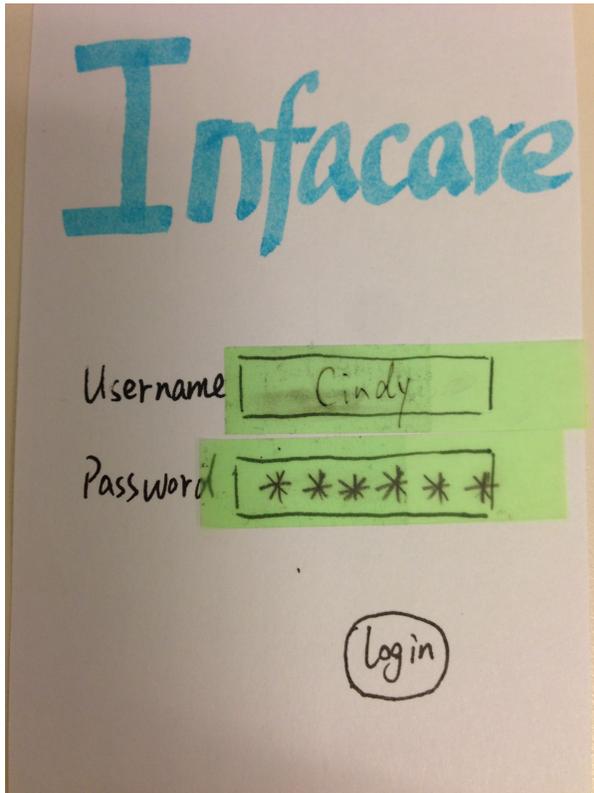


## Interfaces for the most complicated task -- Use the community feature to create a favorited post and find information about your latest symptom

Users can find appropriate posts by clicking on a topic in the word cloud or by choosing a pre-set category at the bottom of the screen. Users have the ability to reply to posts, favorite a post, and vote up or down on the post. The user then replies to a post about morning sickness and selects it as a favorite.



# Sketches of unimplemented portions of the interface



## Wizard of Oz techniques required to use prototype

We didn't use any Wizard of Oz techniques in our design.

## Prototype Screenshots



