Microsoft Capstone Project : Entry Level Software Development.
Annemarleen Bosma: Design Document

Title of Project: MediCall

Problem Area

My chosen problem area is “Health Care”.

Personas

- Persona 1 - ”Anne Janssen”

Meeting the requirements:

Brief demographic description such as age, experiences and resources.

Anne is a young woman, in her midtwenties who prefers to sort out ‘stuff’ by herself first, before she would consider going to a doctor.

Description of a problem this persona has within the problem area ‘health care’.

Figuring out in a quick manner if a health concern could be a side effect of the medication she is on.

Description of current solutions to the problem/ discussion of any kind of behaviour within the problem area.

She will google her side effects and will read horrible stories online; than she scans her leaflets, looking for the the most common side effects first; if it’s not there, she dismisses the healt concern having anything to do with her medication.

- Persona 2 - ”Jan Hopjes”

Meeting the requirements: brief demographic description such as age, experiences and resources.

Jan is a middleaged man in his late 50’s. He takes care of himself pretty well. Making sure he eats healty, stays fit and puzzles a lot.

But Jan does uses a variety of prescription pills. These include pills for his bloodpressure, skincondition and kidneys.

Description of a problem this persona has within the problem area ‘health care’.

The letter in the leaflets are hard to read, so he has to really do his best to scann the leaflets.

Description of current solutions to the problem/ discussion of any kind of behaviour within the problem area.

When Jan expreciences some discomfort, he does check his leaflets. He keeps them well stored, but finds it timeconsuming and hard to read the small letters. He doesn’t want to waste the time of his doctor for every little thing.

To specify more what the problem is, the following list includes 5 unmet needs of Anne Janssen:

1. A quick way to see if one of the medications could cause the side effects the user is experiencing.
2. Not having to google for the side effects and being unsore if what google states is true or not.
3. Not having to search the internet about comments about side effects of a particular kind of medication.
4. Seeing instantly if it is a common or uncommen side effect of the medication.
5. Not having to save the leaflets of her medication.

Benefits that will come from helping Anne solving her current problems are:

1. Knowing instantly if the medication hcan cause the side effect or not.
2. See witch medication could cause the side effects.
3. This way is not time consuming.
4. This way she does not have to read horrorstories on the internet.

The following list includes 5 unmet needs of Jan Hopjes:

1. A quick way to see if one of the medications could cause the side effect Jan is experiencing.
2. A way to read the side effects of his medication easily.
3. To read the side effects of his medication that is not tiresome for his eyes.
4. It is timeconsuming for him to check the side effects of his medication.
5. To be sure the leaflets are up to date.

Benefits that will come from helping Jan solving her current problems are:

1. Knowing instantly if the medication can cause the side effect or not.
2. See which medication could cause the side effects.
3. He will not have to squint his eyes reading the side effects.
4. Does not have to ask a friend or neighbor to read the list of side effects from his medication to him.

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Knowing what troubles Anne and Jan, I ask myself the question: How can I? Or how might we?

In the following list, I include 10-15 How Might We? Questions based on my User Models. I Leave an asterisk next to the 3 HMWs that I find the most interesting, and am excited about to try and answer.

1. How might we speed up the process of checking which medication could cause a given side effect?
2. How might we make sure the information about side effects are up to date?
3. How might we help a user read the medical information more easily?
4. How can we help users keep their leaflets in a sve place?
5. How can we help users save their leaflets?
6. How can we help users not to be confronted with horrorstories that appear acros the internet?
7. How can we give users information that is save, correct and up to date about their medication and/ or side effects?
8. How might we keep our users from feeling embarrassesd to ask help from others?
9. How might we make Jan and Anne a bit more secure about what they feel?
10. How might we make Jan and Anne feel reassured?

Scenarios

Meeting the requirements

I have to write at least 2 scenarios in which the personas might engage with my solution within the problem area ‘Health care’. Like in one of the previous courses, I will use SPICIER [1] to write valid scenarios.

- Scenario 1 -

Anne is checking online if her side effects are caused by her medication.

Introduction, situation and outcome

Anne, a young woman in her midtwenties, studies Physics. She has a parttime job at a diner to help her pay for her studies. She loves having a college life and going out with friends.

1 SPICIER: a mnemonic that stands for Story, Personal details, Implementation-free, Customer’s Story, Insight, Emotions an Environment, Research.

She does have frequent headaches and trouble sleeping. She already takes medication because of her depressing in her earlier years. Next to this she takes some to help her sleep. Sometimes she worries about disorders and would like to find out in a quick way if her medication can cause the discomfort. She doesn't want to dwell on it too long.

<magic happends>

The best way to find out quickly if some of the disorders come from the medication is looking on the internet. A downfall is that Anne sees so much, and it isn't all that pretty. She decides to check the leaflets and with a yellow marker markes the side effects she is experiencing. This way, if she undergoes any of the side effects again she can check rather quickly if it's caused from one of her medication.

- Scenario 2 -

Jan wants to be able to read his leaflets easily.

Introduction, situation, outcome

Jan is a middleaged man in his late 50's. He takes care of himself pretty well. Making sure he eats healthy, stays fit and puzzles a lot to keep his brain healty too.

Although Jan is fit, when he experiences discomfort he eventually will check his leaflets first, before going to any doctor. He does not want to bother his doctor for every little thing.

Unfortenatly the leaflets are hard to read, because of the tiny letters. Because of this it is hard and tiresome to read the leaflets. Jan uses a variety of prescription pills for his bloodpressure, skincondition and kidneys, but his eyesight is just fine for a man his age.

<magic happends>

Jan now uses a magnifying glass to scan the leaflets. Sometimes he asks his dear neighbour to read the leaflets for him, but he does feels a bit burdend doing so.

Chosen Technology

This project will be completed using the following:

IDE:	Visual Studio Code
Technologies:	HTML, CSS, JavaScript
Server:	Node.js, Express
Language:	JavaScript

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Feature List

At least 2 different UI pages

Based on the scenarios and technology, I would like to design and implement the folowing features:

1. Main/ index page
   This is the page the user gets on when he goes to de MediCall app.

2. Ok button
   If an input was giving, the result of pressing the ok-button will be showing the rest of the page with the results.
   If no input was giving, an alertbox will appear telling the user he has to fill out the input area.

3. The result area
   This area shows the result of the input of the user.

At least 3 different user input elements

1. On the index page, the user has to input text. In this case I will make sure he has to enter something. If not, an alert box will appear.

2. On the ‘change medication’ page, the user can input strings, numbers and a date.

At least 1 UI element is affected by the user's input

When the user inputs the side effect, the respond is the quest for confirmation.

When the user does not fill in a input in the main page, there will be an alert box.

After the user submits their input a decision is made based on that input that can cause at least 2 different results.

- When the user enters a side effect on the main index page and clicks the ok button, the rest of the page will appear that asks to confirm or the given input.

- If the user does not enter something as input, an alertbox will appear.

- (to make it even better: if the user fills out the ‘change medication page’ the rest of the page will appear, showing the content the user just entered.)

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A user's information is collected together in a single code structure

In JSON the side effects of the medication the user has, will be collected.