

# CSC505

# User Interface Design

# Final Project

# Document

On

**CAREYOURSELF APP**

By

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# CSC505 User Interface Design

## Final Project

**Project name:** Careyourself application.

### 1. Project Description

At the turn of this century, health outcomes in India and quality of underlying health systems are lagged those of peer nations. The situation is further complicated by inequity in health care access across states and demographic segments within population. It is abundantly clear that a “start quo” approach will be inadequate to tackle this challenging situation. Recent years have seen an increased adoption of smartphones by healthcare professionals as well as the general public. The smartphone is a new technology that combines mobile communication and computation in a handheld-sized device, facilitating mobile computing at the point of care. The main objective of this study is to classify the smartphone-based healthcare technologies in the literature according to their functionalities and summarize them in each category.

The healthcare system is highly mobile in nature, involving multiple clinical locations such as clinics, inpatient wards, outpatient services, emergency departments, operating theatres, intensive care units (ICUs), laboratories, etc. As such, working in the healthcare system requires extensive mobility of healthcare professionals as well as communication and collaboration among different individuals, including their colleagues and patients. This application is grouped according to targeted users (i.e., clinicians, medical nursing, pharmacist, students, and patients). These applications are not intended to replace desktop applications, but to add to existing technologies for better healthcare.

This applications stands as the prism for targeted users. When a person wants to use this application he/she will get direct update of their previous prescriptions to recent prescriptions from clinicians to patients. So this application will be like a gateway to all targeted users. It could be the best bridge between patients, doctors and pharm companies.

Advanced mobile communications and portable computation are now combined in handheld devices called “smartphones”, which are also capable of running third-party software. The number of smartphone users is growing rapidly, including among healthcare professionals. The purpose of this study was to classify smartphone-based healthcare technologies as discussed in academic literature according to their functionalities, and summarize articles in each category.

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professionals mainly used pagers for mobile communication until the wide availability of cell phones in 1990s. The advent of mobile Personal Digital Assistants (PDAs) during 1990s enabled healthcare professionals to organize their contacts and calendars electronically, adding another device in their pockets. The combined functionality of a pager, a cell phone and a PDA is now replaced by a single device called a “smartphone”, which is becoming very popular among healthcare professionals as well as the general public.

The digital revolution has significantly impacted all the spectrums of our life but health care delivery systems have not yet made the best use of the technology at least in India as on today. Tech-savvy doctors are using a vast array of smartphones, other digital devices and medical applications to better communicate with patients as well as to streamline and improve treatment options, get data at the point of care, and practice evidence-based medicine easily. Tech-savvy physicians, especially recent graduates, increasingly rely on digital and internet-based tools to communicate with patients and improve the medical outcomes of the care they provide.

Considering basics, a smartphone is a high-end mobile phone built on a mobile computing platform with portable media player, compact digital video camera and GPS navigation units. Additional features include high-resolution touchscreens, web browsers standard web pages than just mobile-optimized sites, high-speed data via Wi-Fi and mobile broadband. It evolved from 1992-SimonIBM-touchscreen, which was the first smartphone introduced and then came models like 2000-Ericsson R380, Nokia communicator, 2007-Nokia N95, GPS 6110, 2008-iphone 3G, 2010-Nokia N8, iphone 4, 2011- iphone 4s, Win Nokia Lumia 710, and the latest can be a HTC auto stereoscopy-3D without glasses. These work on a basic operating systems, platforms include Android (by Google, used on Intel, HTC, Samsung, Ericsson, Sony, Galaxy nexus). Windows Mobile (by Microsoft) iPhone OS (by Apple, used on iPhone). BlackBerry OS (by RIM). Palm OS (by Palm, used on Palm PC-which is obsolete now. Soon we expect an open handset alliance where the portability and choice to select platform remains with the user.

The information contained in healthcare applications must be accurate. In general, application users must agree with the terms and conditions of use of applications to use the applications, and the users are mainly liable for utilizing the information in the applications. As a result, incorrect or out-dated information from healthcare applications may lead to medico-legal consequences and sometimes there will be confusion of data entry. All the details provided by clinicians should be very easily understood by a common person(patients, students, pharmacist, nursing). At the end of the day the required data need to save could even exceed its limitations. So these could be some of technical problems

- Clarity: the information content is conveyed quickly and accurately.
- Discriminability: the displayed information can be distinguished accurately.
- Conciseness: users are not overloaded with extraneous information.
- Consistency: a unique design, conformity with user's expectation.
- Detectability: the user's attention is directed towards information required.

- Legibility: information is easy to read.
- Comprehensibility: The meaning is clearly understandable, unambiguous, interpretable, and recognizable.
- Biggest task would be the data base designing.

## **2.User Analysis:**

To identify who is the user, user class must be defined. Many applications have several kinds of users. It should be very clear while designing an application/website that design part of project should concentrate on the target users. These users are classified into groups. They are

### **Target users:**

- **By role:** (According to educational qualifications and duties)
  - Clinicians, medical nursing, pharmacist, and *patients*.
- **By characteristic:** (According to their different characteristics)
  - Age, gender, weight, height and Education level.

Educational level depends in the characteristic is much important because if a person doesn't know about the prescription what it contains, where u can see some illiterates from middle east countries.

### **Personas:**

A persona is a fictitious character used as a specific representative of a user class (essentially a stereotype)

#### **Clinicians:**

1. Rosey helps patients with their physical checkups at Albany health care center.
2. Venky takes care of Emma at Albany child care center.

#### **Medical nursing:**

1. Messy 26 year old nurse works under Dr. Rob for making his appointments flexible.
2. Rocky works as a nurse for day care center at central ave.

#### **Pharmacist:**

1. Krishna went to CVS pharma to get his medicines from jeo.
2. Mike went to meet Julian to know details about his prescription.

Patients:

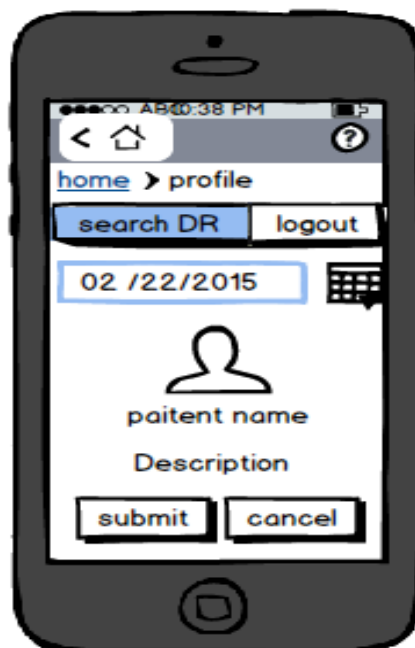
1. Katrina is a 23 year old from downtown Albany his having appointment to meet Dr.shane for his physical checkup.
2. John 60 year old from western ave Albany went to meet Dr.Joespeh about his regular checkup.

### 3. Task Analysis

#### User Class: Patient

##### Task 1: login

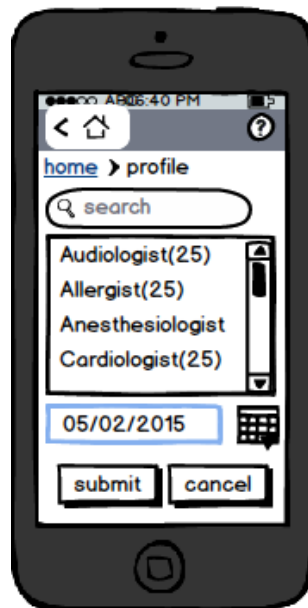
- Go to home page and click on login in button.
- Then enter your login details.
- After that when you submit the details it will enter into main profile.



#### User Class: Patients

##### Task 2: Fixing appointment

- After login go to search Dr.
- find the kind of Dr, where u can have an appointment.
- Then go to calendar to schedule an appointment.
- Now appointment is fixed.



### User Class: Nurse

Task 3: updating patient info on appointment day.

- Before having an appointment with doctor it is necessary to have all the body checkup it could be a physical checkup or mental checkup.
- Enter the name of patient whom had got an appointment.
- Enter the details on the option provided for physical and mental checkup
- Then press save button and the checkups will be updated.



## User Class: Doctors/Patients

Task 4: Entering prescription and saving it/ upload.

- Go to main profile of patient.
- At right corner of application empty document can be found,
- When it is opened doctor can fill it and save it to patient documents.

(or)

- When doctors writes prescription to patient he can even take picture of it and can directly upload into upload documents folder.



## 4. Domain Analysis:

Domain Analysis is the process that identifies the relevant objects of an application domain. The goal of Domain Analysis is Software Reuse. The higher is the level of the life-cycle object to reuse, the larger are the benefits coming from its reuse, the harder is the definition of a workable process.

Identify important things in the domain.

- People (user classes)

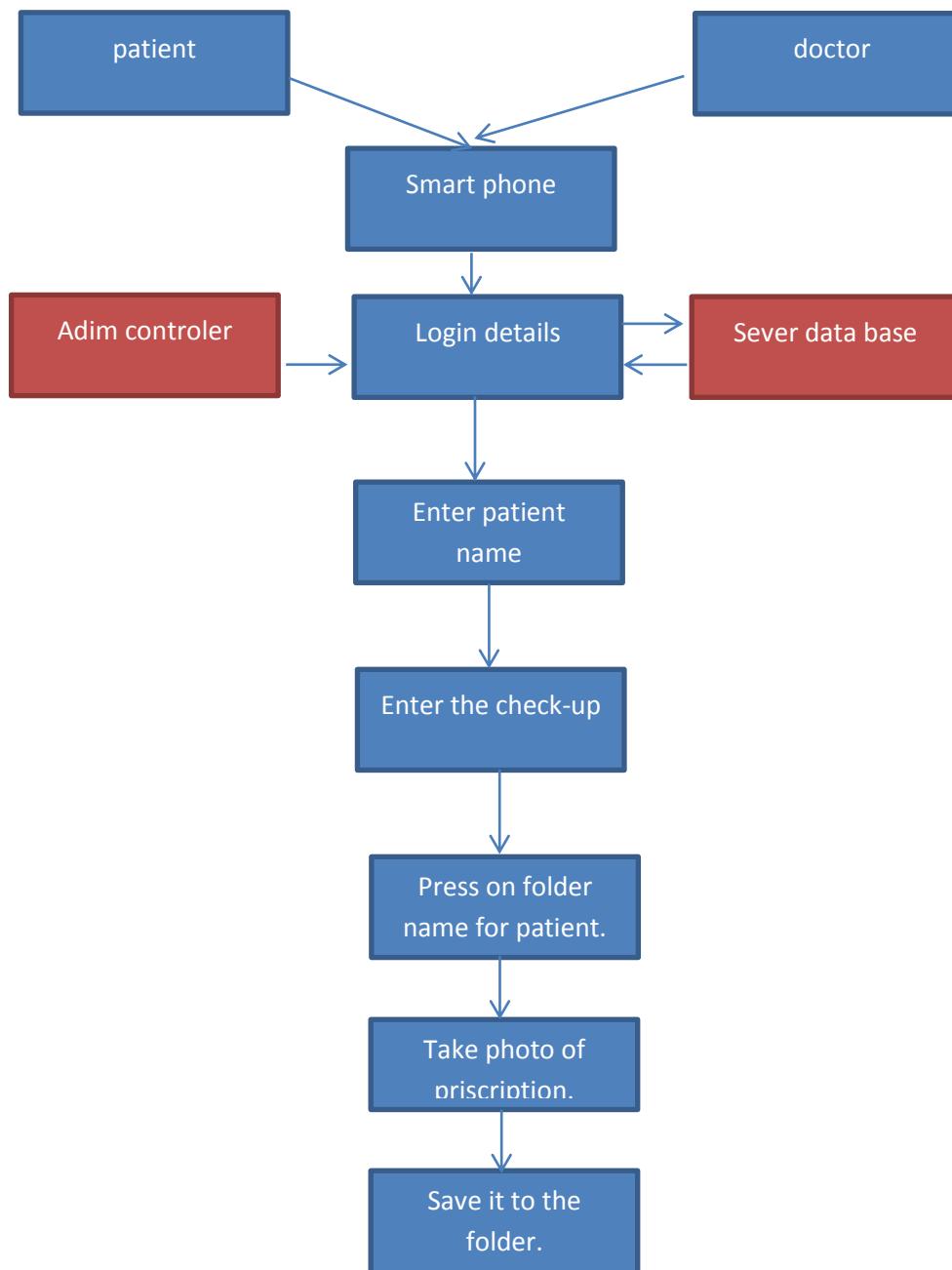
Clinicians, medical nursing, pharmacist, and *patients*.

- Physical objects

Telephone handset, Tablet, name card.

- Information objects

Messages, notifications.





## 5. Scenario

1. Rashmi is 23 old girl uses careyourself application to have an appointment with Doctor. B.sowjanaya Reddy for her dental check-up. She will do an appointment by login to the careyourself app thwn she will search for a dentist. She will perform the task completeing the appointment with Dr.B.Sowjanaya Reddy.
2. Vishwa had finished his regular body check-up from Dr.john. He was confused where he should save his prescription. So he found an application called careyourself app then he created his details and logged in for saving his prescription. He takes a photo with his smartphone and save it in his folder.
3. Rama Devi want to find out her before check-ups so she goes into here last appointments with Dr.lissa and finds out here previous check-up. She will give her login details for the app the she finds a button called description there she can find here history of previous checkups. She will choose a check-up done on 03/02/2105. She feels happy because she has saved her data on application.



(1)

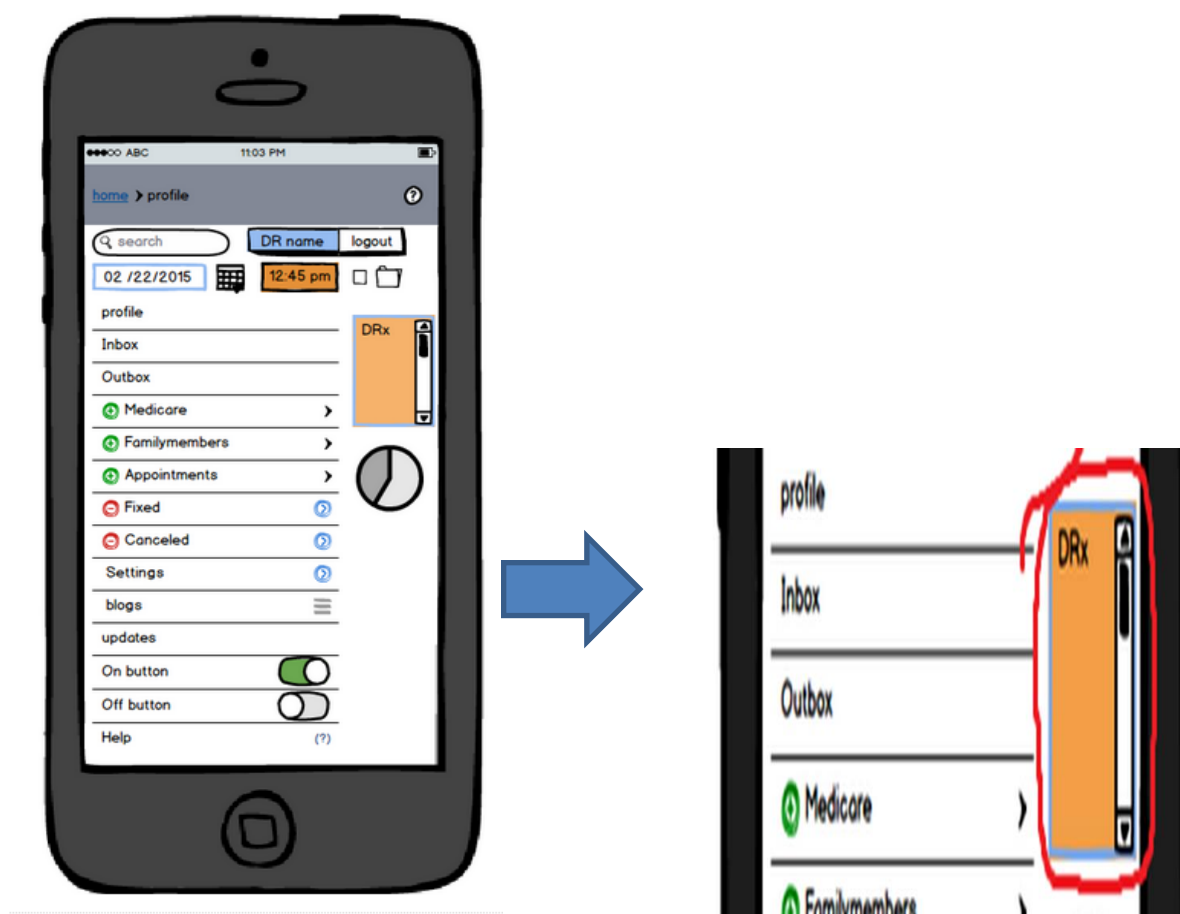


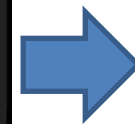
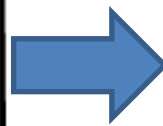
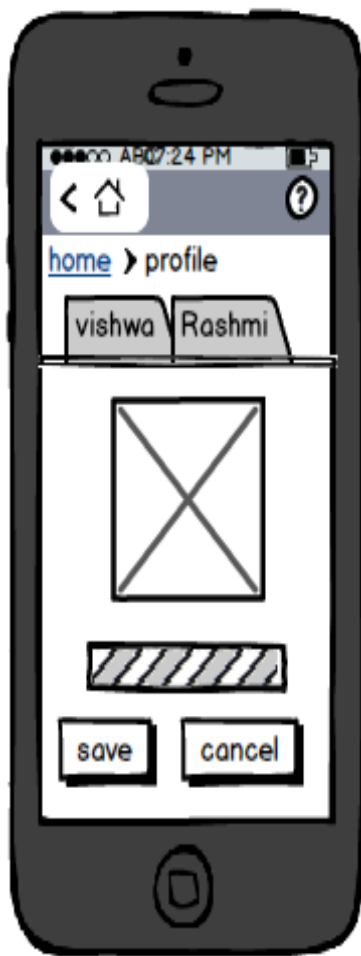
(2)



(3)

## 6. Wireframes / Prototype







## Referneces:

1. <http://www.biomedcentral.com/1472-6947/12/67>
2. <http://www.thehindu.com/books/books-reviews/delving-deep-into-indias-fastgrowing-healthcare-industry/article6475930.ece>
3. [https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0CCoQFjAB&url=http%3A%2F%2Fwww.mckinsey.com%2F~%2Fmedia%2Fmckinsey%2520offices%2Findia%2Fpdfs%2FIndia\\_healthcare\\_inspiring\\_posibilities\\_and\\_challenging\\_journey\\_executive\\_summary.ashx&ei=cgTAVNGABoGdNrCwgKgD&usg=AFQjCNE0W2BCMv6c9ioasrYDbj2jV-ChtA&sig2=QT1wmGRUGIWQRFqJ6MGzXA](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&uact=8&ved=0CCoQFjAB&url=http%3A%2F%2Fwww.mckinsey.com%2F~%2Fmedia%2Fmckinsey%2520offices%2Findia%2Fpdfs%2FIndia_healthcare_inspiring_posibilities_and_challenging_journey_executive_summary.ashx&ei=cgTAVNGABoGdNrCwgKgD&usg=AFQjCNE0W2BCMv6c9ioasrYDbj2jV-ChtA&sig2=QT1wmGRUGIWQRFqJ6MGzXA)
4. <http://www.imedicalapps.com/>
5. <http://www.healthplanone.com/>