

# Patient Management System

for Dispensaries

## The Design Document

# The Underlying Framework

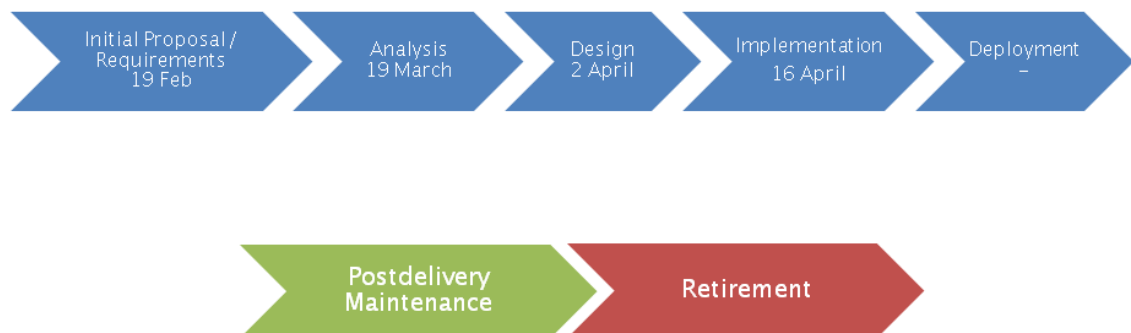
## Frontend

The frontend and the graphical user interface is provided by Microsoft Visual Basic (MS VB) and the .NET Framework.

## Backend

The app is to be powered by Oracle Database linked with the frontend by ODBC. ODBC is the programming interface that enables applications to access data in Database Management Systems using the Structured Query Language (SQL) as a data access standard.

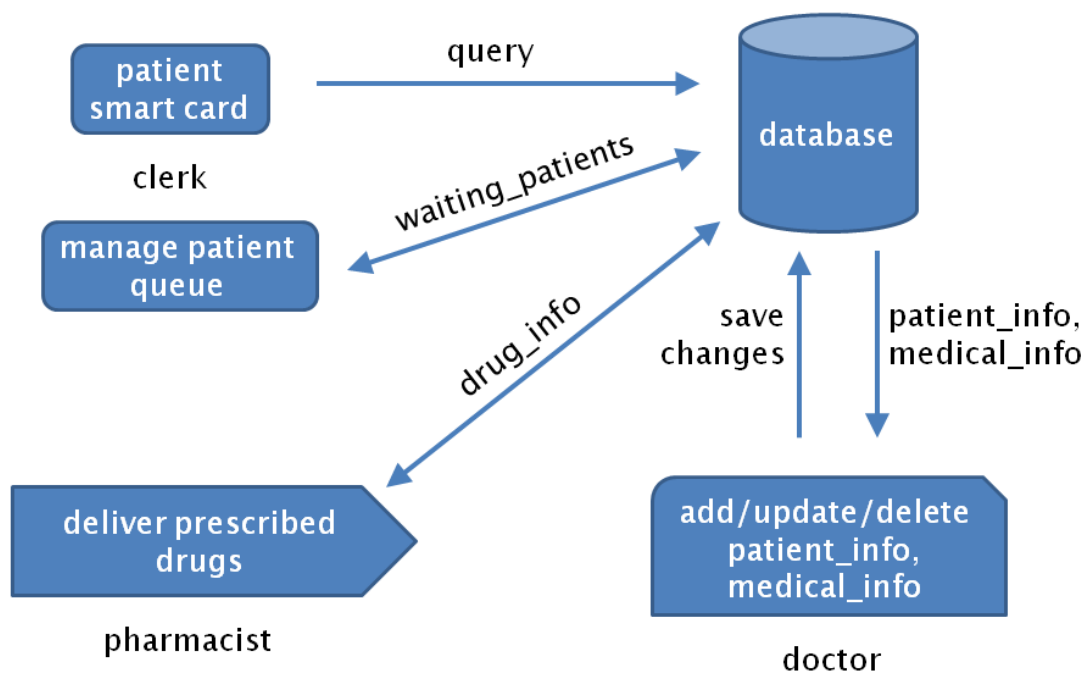
# Software Project Management Plan



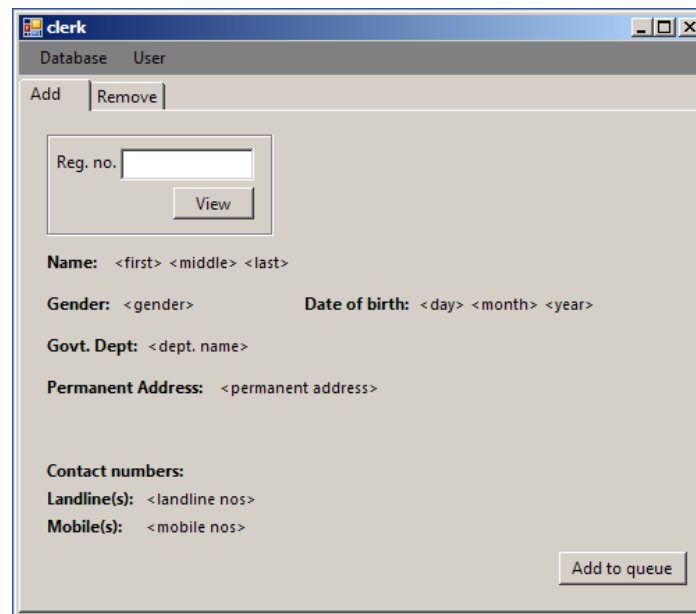
## Flow of Data

- Patient is given a chart where all the data is recorded regarding his/her medical history and prescriptions given on the last visit.
- After examination, the doctor fills up the chart, the details of the disease or ailment , symptoms detected and prescribing the relevant drugs.
- The patient is required to maintain the chart and bring it with them on every visit so that the staff as well as the doctor can use it as reference to the history of the patient.
- The patient carries the now updated chart to the pharmacist
- The pharmacist provides the drugs as prescribed
- In case of serious/chronic conditions, the patient is referred to a specialist doctor

## Data Flow Diagram



# User Interface Design



The 'clerk' window has a 'Database' tab selected. It contains 'Add' and 'Remove' buttons. A 'Reg. no.' text box is followed by a 'View' button. Below these are labels for 'Name', 'Gender', 'Date of birth', 'Govt. Dept.', 'Permanent Address', 'Contact numbers', 'Landline(s)', and 'Mobile(s)', each followed by a placeholder text like '<first> <middle> <last>'. An 'Add to queue' button is at the bottom right.

clerk

Database User

Add Remove

Reg. no.

View

Name: <first> <middle> <last>

Gender: <gender> Date of birth: <day> <month> <year>

Govt. Dept: <dept. name>

Permanent Address: <permanent address>

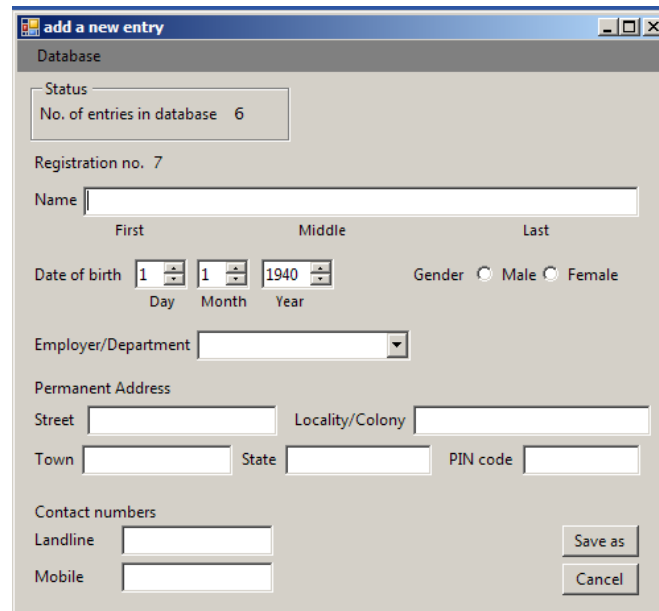
Contact numbers:

Landline(s): <landline nos>

Mobile(s): <mobile nos>

Add to queue

Patient Record Detail Screen



The 'add a new entry' window has a 'Database' tab. It shows 'Status' and 'No. of entries in database 6'. The 'Registration no.' is 7. The 'Name' field is split into 'First', 'Middle', and 'Last' sections. The 'Date of birth' is split into 'Day', 'Month', and 'Year' sections. The 'Gender' is selected as 'Male'. The 'Employer/Department' is a dropdown menu. The 'Permanent Address' section includes 'Street', 'Locality/Colony', 'Town', 'State', and 'PIN code' fields. The 'Contact numbers' section includes 'Landline' and 'Mobile' fields. 'Save as' and 'Cancel' buttons are at the bottom right.

add a new entry

Database

Status

No. of entries in database 6

Registration no. 7

Name

First Middle Last

Date of birth    1940 Gender ☐ Male ☐ Female

Day Month Year

Employer/Department

Permanent Address

Street  Locality/Colony

Town  State  PIN code

Contact numbers

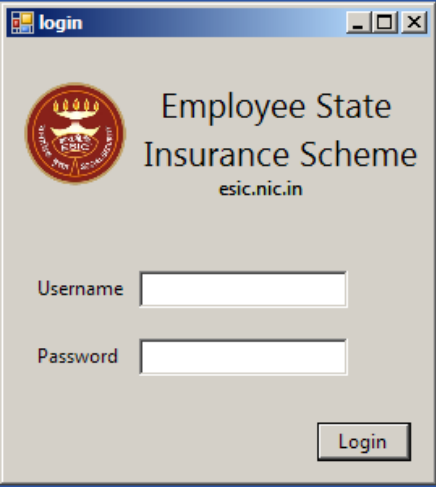
Landline

Mobile

Save as

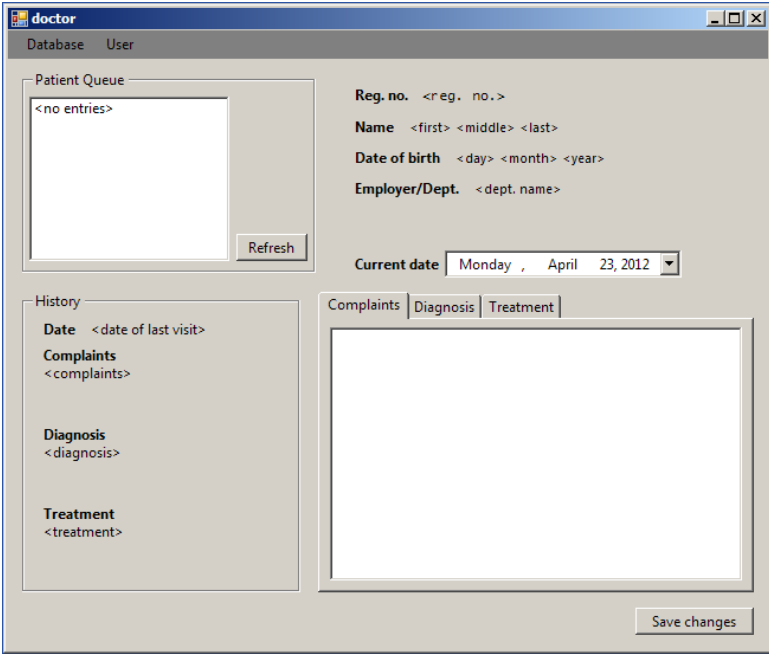
Cancel

New Patient Record Screen



The dialog box is titled "login" in the top-left corner. It features the ESIC logo on the left and the text "Employee State Insurance Scheme" and "esic.nic.in" on the right. Below this, there are two input fields: "Username" and "Password". A "Login" button is located at the bottom right.

User Login Dialog Box



The "doctor" screen has a menu bar with "Database" and "User". It is divided into several sections:

- Patient Queue:** A list box showing "<no entries>" with a "Refresh" button below it.
- Form Fields:**
  - Reg. no. <reg. no.>
  - Name <first> <middle> <last>
  - Date of birth <day> <month> <year>
  - Employer/Dept. <dept. name>
  - Current date: Monday, April 23, 2012 (with a dropdown arrow)
- History:** A section with labels for "Date" <date of last visit>, "Complaints" <complaints>, "Diagnosis" <diagnosis>, and "Treatment" <treatment>.
- Complaints, Diagnosis, Treatment:** A large text area for notes, with tabs for "Complaints", "Diagnosis", and "Treatment" at the top.
- Save changes:** A button at the bottom right.

Doctor Screen

## Database Tables

- login\_table
  - username
  - password
  - usertype
- user\_table
  - id
  - name
  - dob
  - dept
  - gender
  - landline
  - mobile
  - street
  - locality
  - town
  - state
  - pincode
- health\_table
  - id
  - last\_visit
  - complaints
  - diagnosis
  - treatment
- queue\_table
  - place
  - id