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ROLL : 1807045

DOCTOR APPOINTMENT

OBJECTIVES ---To develop an interective JAVA Desktop Application to Fix **doctor appointment for patients** where they can choose doctors,fix appointments,create items,get prescriptions from doctors and rate the doctors.

Here is an **admin** to control the whole precess who can monitor,control and change the options.

Doctors are also able to use this application to visit patients,give prescriptions and monitor patients status.

Patients can visit websites (such as **appointments** online,get **health** tips and check the **details** of all **medicine** available in market **directly** from this **application** .

Introduction   This DOCTOR APPOINTMENT application is a JAVA desktop application specially designed for PATIENTS and DOCTORS and an intemidiate users called admin to control the options of this application.

For Patients they can login and sign up in this application, choose doctors as they like and fix appointment with him with his/her fiseable time .And they can get short prescription from doctor via this application.One can keep record the medical

Items he purchased by price ,quantity and product name.

For **Doctors** they can sign up here as the patients can find then easily ,they can have an appointment with the patients , Visit them and give them a short prescription to cure them. There is a option of rating where doctors can be rated by patients and thus get much exposure.

There is also an **Admin** who controls all the main activity like he can add patients doctors ,fix appointments that patients Were requested ,he alos manage the rating system of doctors given by the patients.He plays a vital role in this application

All the three users can login in this application and here there is three Panels for three different users. We have different features for three individual users. Like the patient and the doctor can see the prescriptions given but the admin can't see that. For security purpose all the names of patients and doctors are encrypted to Admin. He can only see the ID No. Of the patients and doctors .
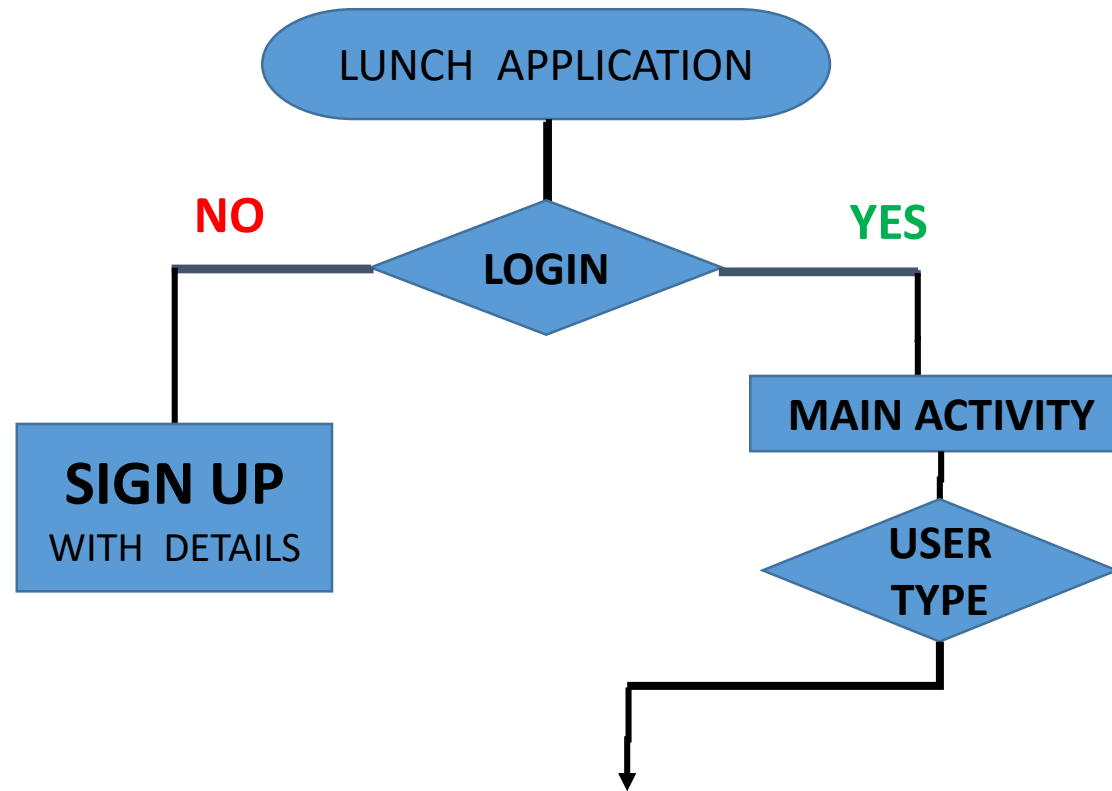
Here there is an option for the patients only to view websites directly from the application in   it's run time . Using this feature the patients are able to see the doctors in different departments (like cardiologist, cancer, medicine etc.) in different country locations. All this are done through web technology. Moreover the patients also can have health tips free in Bangla and also check details of the medicines available in the market . These are the main features of this
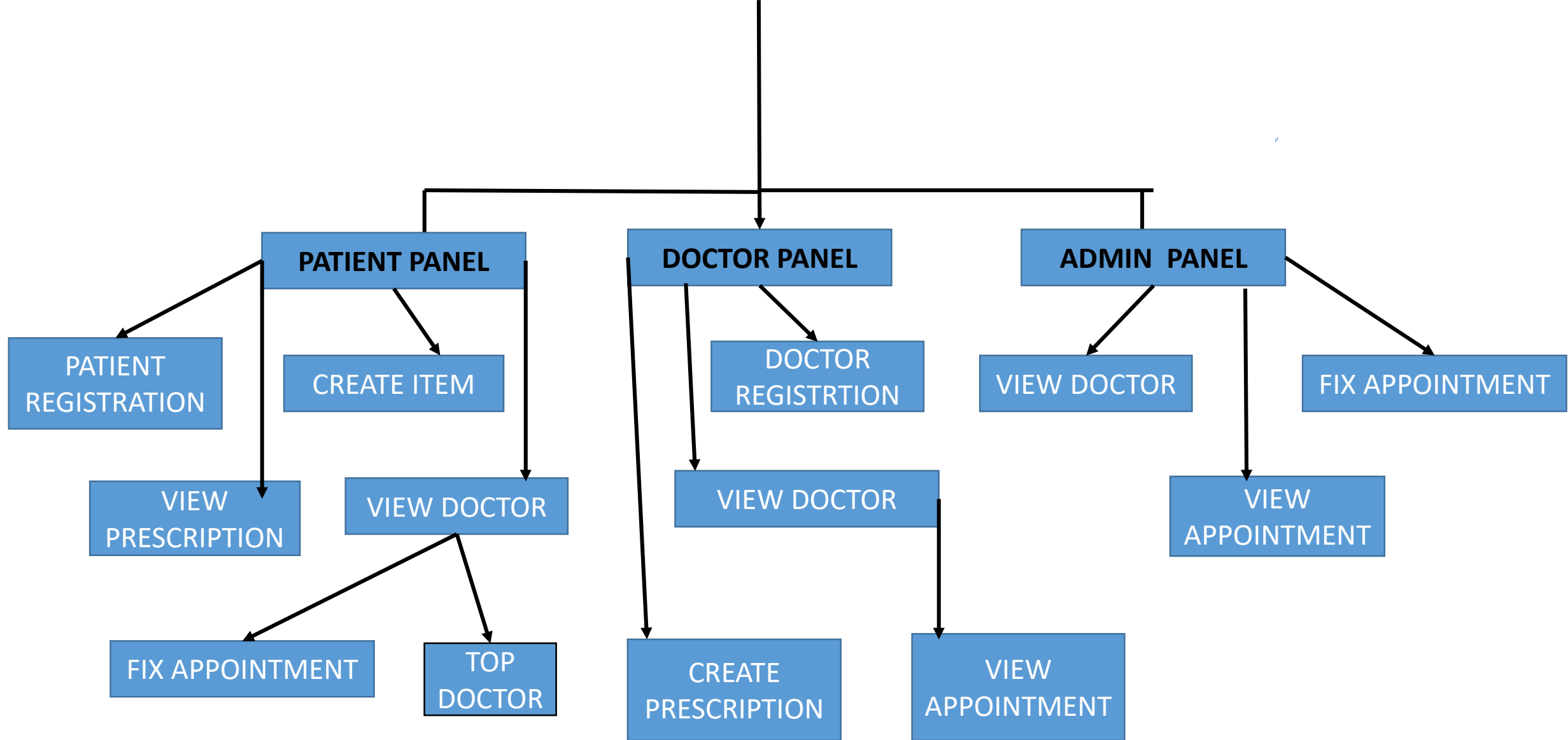
application. Now get back to the instruments that are been used to make this application .those are listed below :
1. Netbeans IDE 8.2
2. Xampp Mysql local host
3. A Browser(Microsoft Edge)
4. A well configuraed Laptop

JAVA Swing was used as the design and operation part and as the database the xampp MySql was been used. A Browser was used to deal with the database. But to integrate the functionality of web JAVAFx was been used.

Implementation (FLOW CHART)

LUNCH APPLICATION

NO

YES

LOGIN

SIGN UP

WITH DETAILS

MAIN ACTIVITY

USER TYPE

PATIENT PANEL

DOCTOR PANEL

ADMIN PANEL

PATIENT REGISTRATION

CREATE ITEM

VIEW PRESCRIPTION

VIEW DOCTOR

FIX APPOINTMENT

TOP DOCTOR

DOCTOR REGISTRTION

VIEW DOCTOR

CREATE PRESCRIPTION

VIEW APPOINTMENT

VIEW DOCTOR

FIX APPOINTMENT

VIEW APPOINTMENT

Login

User Name

Username
If not signed up,go to
SIGN UP

Password

Password

SHOW PASSWORD

Check box

User Type Admin

User tyoe

Login Exit

Exit button

Login button

Don't have an account? Create account

Activate Windows
Go to Settings to activate Windows.

Fig 1—LOG IN PAGE

User Creation

Name [   ]

Username [   ]

Password [   ]

Usertype [Admin ▼]

[Add]   [Cancel]

Back to Login Page

ONLINE
APPOINTMENT

Fig –Sign up page (user creation)

Name , Username, Password & usertype are given to sign up

This combobox selscts the usertype that fixes the next page access as patient panel/doctor panel/admin panel

After giving all this info for signup ,pressing the button lets one to be a user & saves this data in database & matches in the next trial of LOG IN

Cancel the visibility of current page

If the user is already signed up then directly he can log in by username & password in ''LOG IN ''page

All this buttons redirects to different pages that are depicted in later pages of this report

SAN HOSPITAL

Patient
View Appointment
View Prescription
Create Item
View Doctor

Log out

UserName	PP
UserType	Patient

Fig 2-patient panel

Takes the user to the LOG IN page again for new LOG IN

Patient Registration

List of top doctors are here

Patient Registration

Patient No	PS005

Patient Name

Phone

Address

View Top Doctors

Patient No	Patient Name	Phone	Address
PS002	zv	00434	cttg
PS003	mn	01323	khulana
PS004	ab	0545464	josssore

ADD, UPDATE, DELETE patient ID

Add   Update   Delete   Exit

REGISTRARED PATIENTS LIST

Fig 3—patient registration

Fig 4-patient registration operation (update)

All the changes in here also happens on database

Patient data has been updated (messege box)

Patient details are updated in the data table

View Appointment

Channel No	Doctor Name	Patient Name	Room No	Date
CH004	N	mn	1	2021-06-29
CH005	N	mn	3	2021-06-11
CH006	N	zv	2	2021-06-02
CH007	HC	zv	2	2021-06-18

Prescription

Exit

Fig 5—view doctors appointment table

The selected row is of a fixed appointment.Now patient is logged in and can see the prescription given by the doctor he chosed. To do so this button should be pressed amd then he can see the prescription given to him……..

Pressing it goes back to the previous page (patient panel)

Shows all the appointment that is been fixed

Prescription No   PC004

Channel No   CH004

Disease Type

Description

Create   Cancel

Fig 6—create prescription table(access to doctors only)

After inserting all the labels ,pressing this button creates a prescription for the patient accessible for him and aslo the doctor too

Here attributes are created by cod eand database automatically

Pressing this button takes user to the previous page named VIEW APPOINTMENT

Theses are editable by doctors

Create Item

Create Item

Item id   IU003

Item Name   [   ]

Description   [   ]

Price   [   ]

Quantity   [   ]

Itemno	Item Name	Description	Price	Quantity
IU002	napa	tablet	20	3

Created Items are listed in this table serially that are given by patients

Add   **Update**   **Delete**   **Exit**

Activate Windows

Fig 7– Create Item table by Patients

These three buttons are used to ADD ,UPDATE, DELETE the data of created items by patient manually

This label is created is created automatically by the code and database is constant

Pressing this button takes user to the previous page named VIEW APPOINTMENT

Other labels are been editable by the patient himself in run time & saved in data base

Doctor List

Doctor No	Doctor Name	Specialization	Qualification	Fee	Phone	Room No
DS001	N	medicine	MBBS	300	01223	30
DS002	HG	EYE	MBBS	400	01233848	6

Details of available doctors are shown here and patients can select directly from here(fix appointment)

Request Channel

Close

Fig 8-Available Doctors List (signed up doctors)

This is the pre-page of fix appointment. By selecting the available doctors from this list and pressing this button patients can request for appointment to the admin that will be approved later by admin in a fiseable time of patient given

Pressing this button takes user to the previous page named VIEW APPOINTMENT

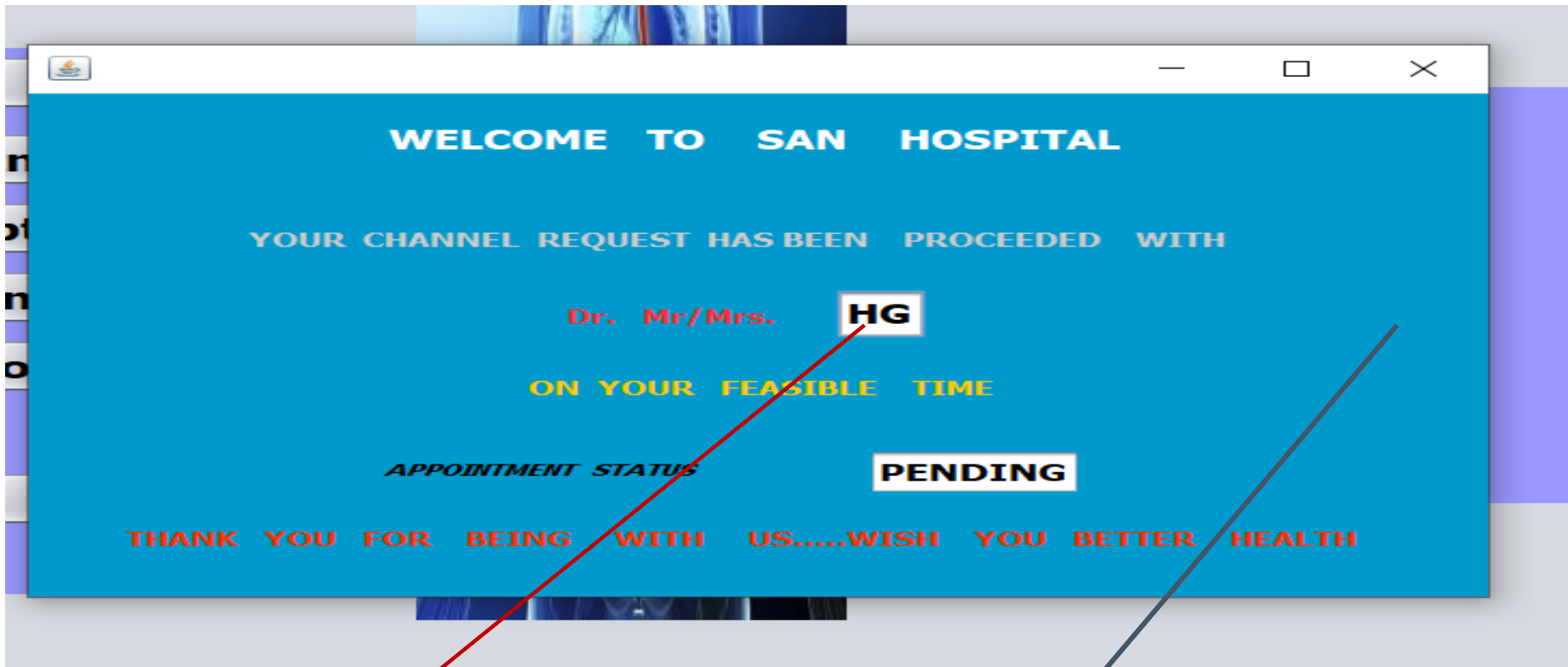(It is the main functional page of this application)

Fig 9—Confirmation of requesting for appointment of Patients

Name of doctor with whom appointment is

After requesting for the appointment patients see this page so that they can be sure about their appointment & it's status

This button leads users to the DOCTROS LIST ACCESSIBLE FOR ALL TYPE OF USERS

Pressing the button takes users to the VIEW APPOINTMENT page accessible for patients , doctors & the admin also

Links up users with page named VIEW DOCOTRS accessible for all users

This takes users backs to the LOG IN page for new login

SAN HOSPITAL

Doctor

View Appointment

View Doctor

Log out

UserName   dd

UserType   Doctor
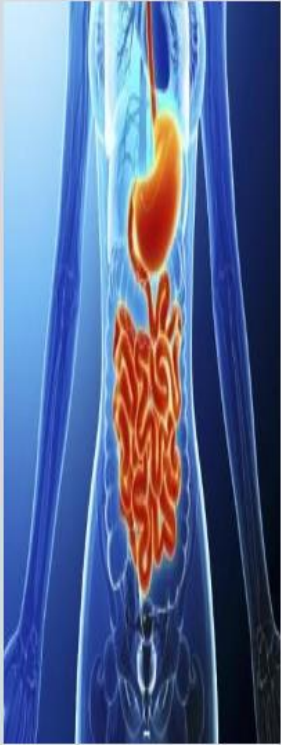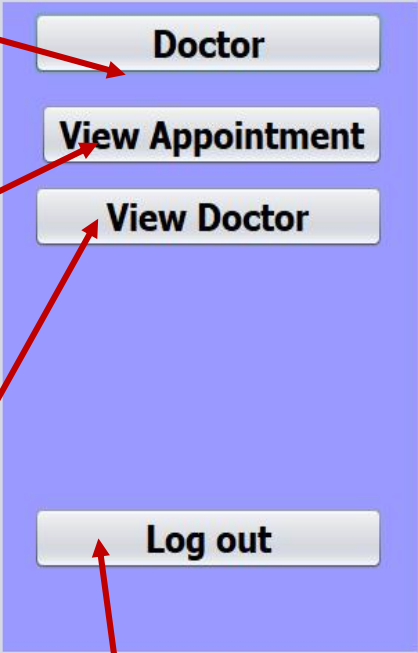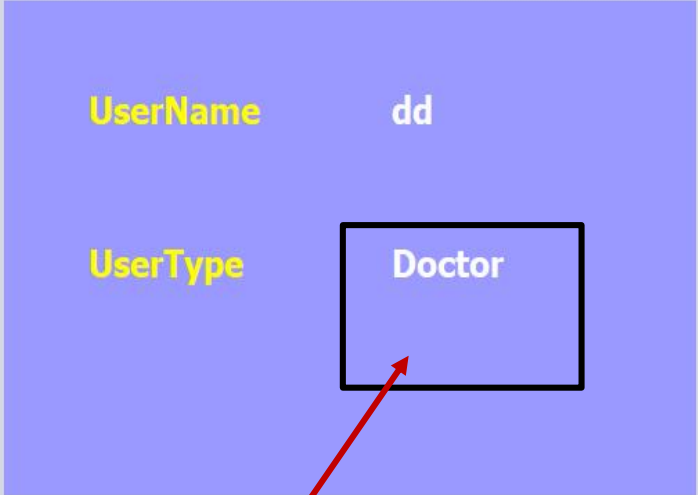
THANK YOU FOR CHOOSING US

This label indictes that this page is for only doctors

Fig 10—Doctor's panel(only access to Doctors)

This is automatically generated by the code & database

Only accessible for doctors

These fields are filled by the doctors & all data are saved in database

All this buttons performs ADD, UPDATE & DELETE operation when a particular doctor row is selected from the TABLE in right side(doctors list)

Doctor Registration

Doctor Registration

Doctor No   **DS003**

Doctor Name

Specialization

Qualification

Channel fee

Phone

Room no   0

Doctor No	Doctor Name	Specialization	Qualification	Channel fee	Phone	Room No
DS001	N	medicine	MBBS	300	01223	
DS002	HG	EYE	MBBS	400	01233848	

Add   Update   Delete   Exit

Activate Windows

Fig 11—Doctor's Registration List (access only to Doctors)

List of available doctors from where one can select one row at a time & perform the said operatiobs

Both these buttons takes the users back to thE MAIN Page WHERE they can Log in together as other user type

Pressing this button admin can give patients details & make him a user os this application. Next time that patient can directly LOG IN to use this application

This button takes the Admin to his main functional page whre he can check the appointment requests of patients and confim the appointments & if he confirms the patient gets an confirmation page accessible from the patients panel

This button takes the Admin to the page VIEW DOCTOR also accessible for both Doctors & Patients

SAN HOSPITAL

Patient

Fix Appoinment

View Doctor

Log out
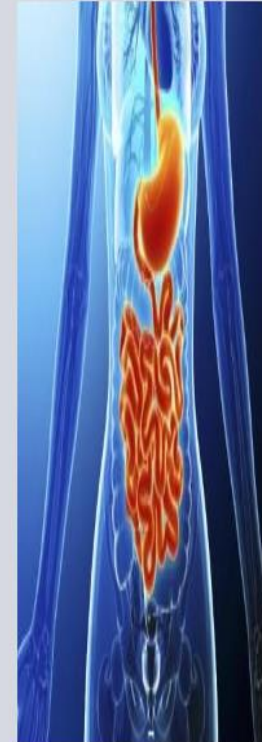
UserName   aa

UserType   Admin

THANK YOU   FOR CHOOSING US

Fig 12—Admin Panel(main page for admin)

Pressing this button takes the user to the main page where he can also LOGIN as a patient and fix his own appointment with available doctors

This is automatically generated by the code & database

From this three combobox admin can select any of the available patient, doctors &also the room no. where the chamber of the doctor is

Fix Appointment

Channel No	Doctor Name	Patient Name	Room No	Date
CH004	DS001	PS003	1	2021-06-29
CH005	DS001	PS003	3	2021-06-11
CH006	DS001	PS002	2	2021-06-02
CH007	DS002	PS002	2	2021-06-18

Channel Registration

Channel No   **CH008**

Patient Name   zv

Doctor Name   N

Room No   0

Channel Date

June						2021
	Sun	Mon	Tue	Wed	Thu	Fri	Sat
23			1	2	3	4	5
24	6	7	8	9	10	11	12
25	13	14	15	16	17	18	19
26	20	21	22	23	24	25	26
27	27	28	29	30			

Create   **View Request**   **Delete**   CLOSE

Fig 13

By choosing one row & pressing this button an appointmemt can be deleted

JAVA calender used by the admin to fix the appointment date

Pressing the button creates a new appointment by the Admin by selecting one row from this TABLE

This button shows Admin the lpending appointment requests by Patients

Takes back to the Admin panel page

Name of the doctor

Name of patient who wants the appointment

WELCOME TO SAN HOSPITAL (ADMIN)

A CHANNEL REQUEST HAS BEEN PROCEEDED OF

WITH Dr. Mr/Mrs. **HG**

ON YOUR FEASIBLE TIME

THANK YOU FOR BEING WITH US.....WISH YOU BETTER HEALTH

ONLY ACCESSED TO ADMIN

Fig 14—Confirmation of appointment after the Admin accepts it from VIEW REQUEST page

This page is only accessible to Admin from the VIEW REQUSET page

Hospital (run) #2   running...

TOP DOCTORS

TOP CHART IS MADE ON THE BASIS OF FREQUENCY OF DOCTORS BEEN VISITED

DOCTOR NAME	SPECIALIZATION	RATING
N	medicine	3
HG	EYE	2
d1	heart	1
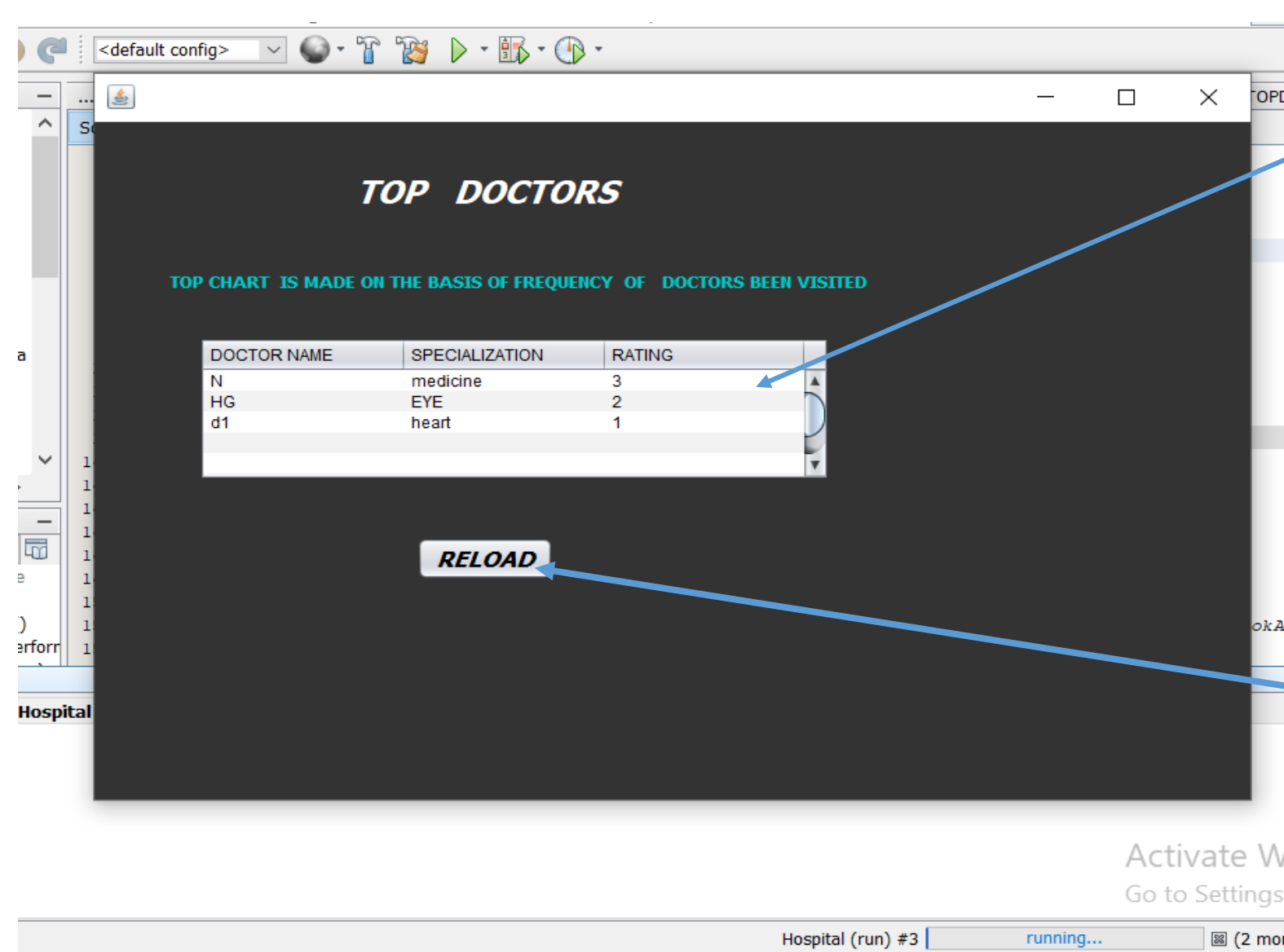
RELOAD

This TABLE represents the HIGH Rated doctors available here. Patients can rate the doctors after visiting him on appointment. And on the basis of that rating the doctor list here is been sorted

This button reload this page.Because if the rating of any doctor is changed , then after reload the correct rating of all doctors can be seen. The ratings are saved in localhost database

Fig 15—List of Top Doctors (according to rating given by patients)

Top Categories

ENT

Kidney & Medicine

Neuromedicine

Orthopaedic Surgeon

Gastroenterology

Urologist

HEALTH TIPS!!!

BACK!!!

VIEW MEDICINE!!!

Hospital (run) #4 | running... ⊠ (3 more..
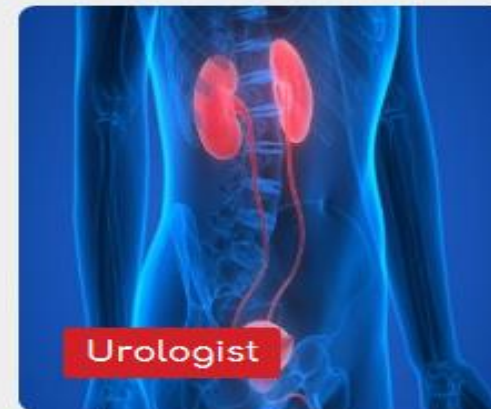
Fig 16—WebView –1 online website to fix appointment of different departments (like kidney & medicine, urologist etc.) doctors .

To get health tips online click here

To see various types of medicine online click here

Medicine

Pediatrics

Gynaecology & Obstetrics

Top Locations

Banasree

Dhaka Cantonment

Dhanmondi

Farmgate
42 Listings

HEALTH TIPS!!!

BACK!!!

VIEW MEDICINE!!!

Activate Win
Go to Settings to

Hospital (run) #4 | running... | (3 more...)
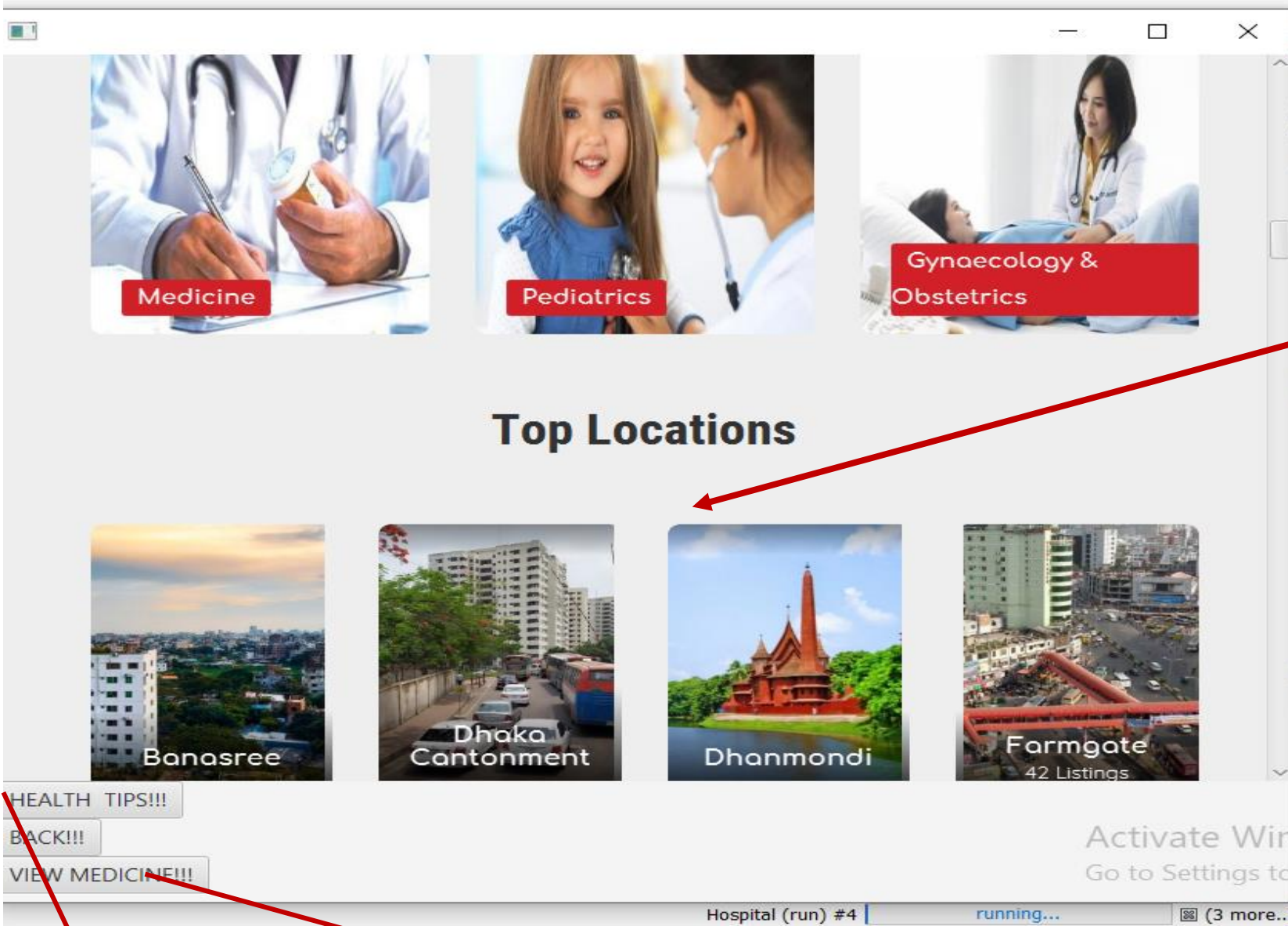
Fig 17—WebView 2—the same website previously shown gives feature to find doctors on your suitable location on your own city

To get health tips online click here

To see various types of medicine online click here

Dr. Tanvir Ahmed Chowdhury

🏴 Urologist

🏷 MBBS, BCS, FCPS (Urology), Urologist

📍 Dhanmondi   Closed Now!

Prof. Dr. Salahuddin Kowser Biplob

🏷 Psychiatrists

🏷 MBBS (Dhaka) M.Phil (Psychiatry), MD (Psychiatry),

Dr. Ahasan Uddin Ahmed

🏷 Psychiatrists

🏷 MBBS, BCS (Health), MCPS (Psychiatry), FCPS (Psychiatry), Specialist-Psychiatry

HEALTH TIPS!!!

BACK!!!

VIEW MEDICINE!!!

Activate Win
Go to Settings to
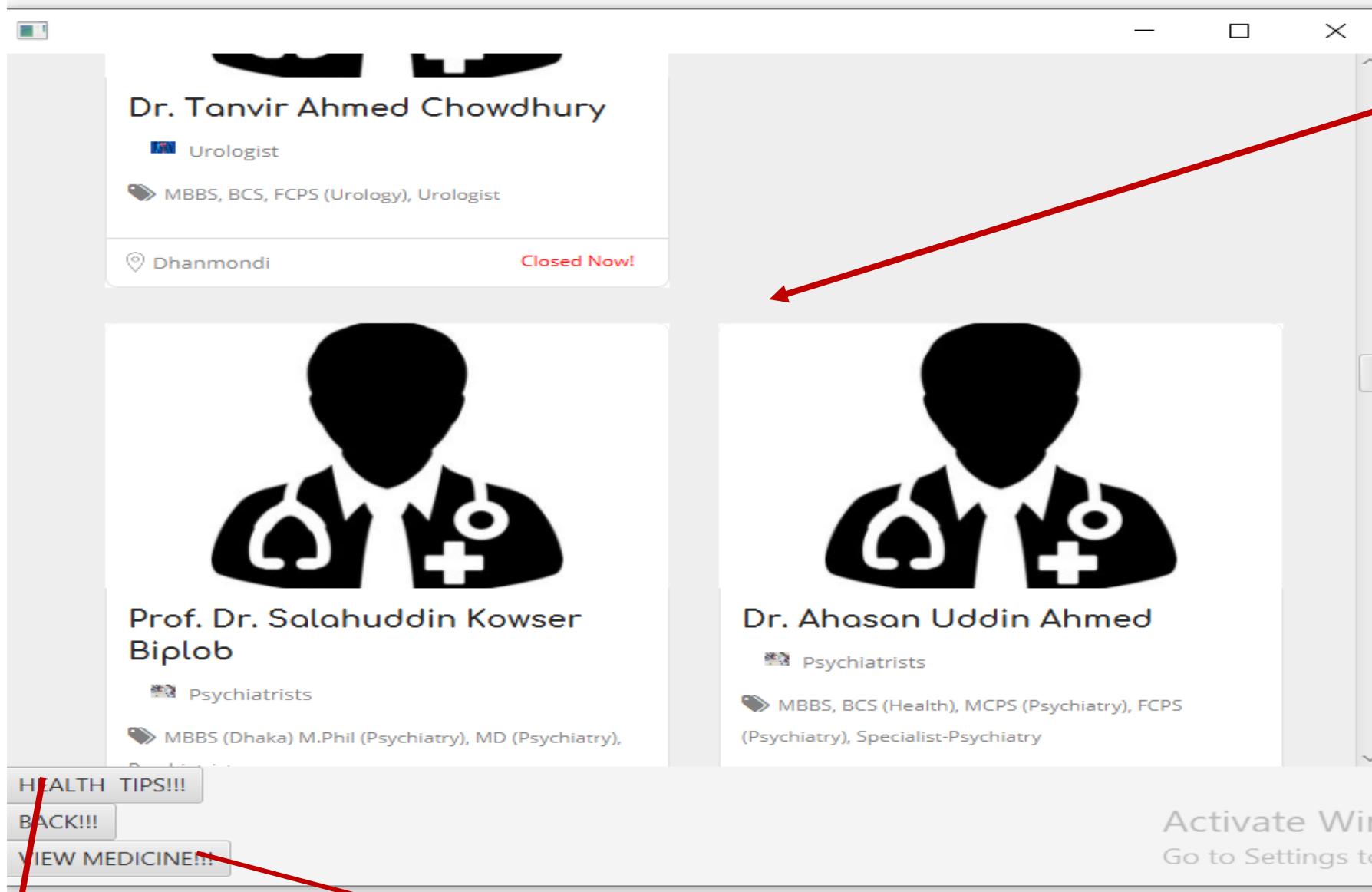
Fig 18- WebView 3— the same website previously explained also gives advantages to see the doctord available here for the appointment .The only access of this website is to the Patients.

To get health tips online click here

To see various types of medicine online click here

Fig 19—WebView 4—the websites for health tips(2 pages are shown in figure)

FILTER   Search by brand or generic name

List of Generic Names (Allopathic)

↓⒜ Browse Alphabetically

5-Fluorouracil [5-FU]
Fluorouracil is indicated alone or in combination for- Carcinoma of the colon or rectum Carcinoma of the stomach and exocrine pancreas Carcinoma of the liver Carcinoma of the breast Carcinoma ...

Abacavir + Lamivudine + Zidovudine
This is indicated in combination with other antiretrovirals or alone for the treatment of human immunodeficiency virus type 1 (HIV-1) infection.

Abiraterone Acetate
Abiraterone Acetate is a CYP17 inhibitor indicated in combination with prednisone for the treatment of patients with Metastatic castration-resistant prostate cancer (CRPC). Metastatic high-risk castration-sensitive ...

Acarbose
Acarbose is indicated as an adjunct to diet and exercise to improve glycemic

Acetylcysteine
Acetylcysteine is indicated as an adjuvant treatment in certain clinical condition characterized by the presence of thick and viscous mucoid or mucopurulent secretions such as: Chronic bronchopulmonary ...

Acidic component [HCO3 Hemodialysis Solution]
This solution is used in Haemodialysis.

Acitretin
Acitretin is indicated in severe extensive psoriasis which is resistant to other forms of therapy, palmo-plantar pustular psoriasis, severe congenital ichthyosis, severe Darier's disease (keratosis ...

Activated Charcoal
Diarrhoea poisoning due to foods, heavy meals drugs. Flatulence due to diet other factors.

HEALTH TIPS!!!
BACK!!!
VIEW MEDICINE!!!

Abiraterone Acetate

Innovator's Monograph

Available Brand Names   View Details

FILTER BY COMPANY

Indications

Abiraterone Acetate is a CYP17 inhibitor indicated in combination with prednisone for the treatment of patients with
- Metastatic castration-resistant prostate cancer (CRPC).
- Metastatic high-risk castration-sensitive prostate cancer (CSPC).

Therapeutic Class

Cytotoxic Chemotherapy

Pharmacology

Abiraterone is an orally active inhibitor of the steroidal enzyme CYP17A1 (17 alpha-hydroxylase/C17,20 lyase). It inhibits CYP17A1 in a selective and irreversible manner via covalent binding mechanism. CYP17A1 is an enzyme that catalyzes the biosynthesis of androgen and is highly expressed in testicular, adrenal, and prostatic tumor tissue. More specifically, abiraterone inhibits the conversion of 17-hydroxyprognenolone to dehydroepiandrosterone (DHEA) by the

Abiret
250 mg
Drug International Ltd.
Unit Price : ৳ 500.00

Zytiga
250 mg
UniMed UniHealth
Unit Price : ৳ 1,665.82

Zytix
250 mg
Beacon Pharmaceuticals Ltd.
Unit Price : ৳ 580.00

Fig 20—WebView 5-website for searching medicine details available in the

HEALTH TIPS!!!

Dosage & Administration

Metastatic castration-resistant prostate cancer: Abiraterone 1,000 mg orally once daily with prednisone 5 mg orally twice daily.

Metastatic castration-sensitive prostate cancer: Abiraterone 1,000 mg orally once daily with prednisone 5 mg orally once daily.

Patients receiving Abiraterone should also receive a gonadotropin-releasing hormone (GnRH) analog concurrently or should have had bilateral orchiectomy. Abiraterone must be taken on an empty stomach with water at least 1 hour before or 2 hours after a meal. Do not crush or chew tablets.

Dose Modification:
- For patients with baseline moderate hepatic impairment (Child-Pugh Class B), reduce the Abiraterone starting dose to 250 mg once daily.
- For patients who develop hepatotoxicity during treatment, hold Abiraterone until recovery. Retreatment may be initiated at a reduced dose. Abiraterone should be discontinued if patients develop severe hepatotoxicity.

* চিকিৎসকের পরামর্শ মোতাবেক ঔষধ সেবন করুন

Interaction

CYP3A4 Inducers: Avoid concomitant strong CYP3A4 inducers during Abiraterone treatment. If a strong CYP3A4 inducer must be co-administered, increase the Abiraterone dosing frequency.

CYP2D6 Substrates: Avoid co-administration of Abiraterone with CYP2D6 substrates that have a narrow therapeutic index. If an alternative treatment cannot be used, exercise caution and

Side Effects

The most common adverse reactions are fatigue, arthralgia, hypertension, nausea, edema, hypokalemia, hot flush, diarrhea, vomiting, upper respiratory infection, cough, and headache.

Pregnancy & Lactation

The safety and efficacy of Abiraterone have not been established in females. Based on findings from animal studies and the mechanism of action, Abiraterone can cause fetal harm and potential loss of pregnancy. There are no human data on the use of Abiraterone in pregnant women. The safety and efficacy of Abiraterone have not been established in females. There is no information available on the presence of abiraterone acetate in human milk, or on the effects on the breastfed child or milk production.

Precautions & Warnings

Mineralocorticoid excess: Closely monitor patients with cardiovascular disease. Control hypertension and correct hypokalemia before treatment. Monitor blood pressure, serum potassium and symptoms of fluid retention at least monthly.

Adrenocortical insufficiency: Monitor for symptoms and signs of adrenocortical insufficiency. Increased dosage of corticosteroids may be indicated before, during and after stressful situations.

Hepatotoxicity: Can be severe and fatal. Monitor liver function and modify, interrupt, or discontinue Abiraterone dosing as recommended.

Increased fractures and mortality in combination with radium Ra 223 dichloride: Use of Abiraterone plus prednisone/prednisolone in combination with radium Ra 223 dichloride is not recommended.

HEALTH TIPS!!!

BACK!!!

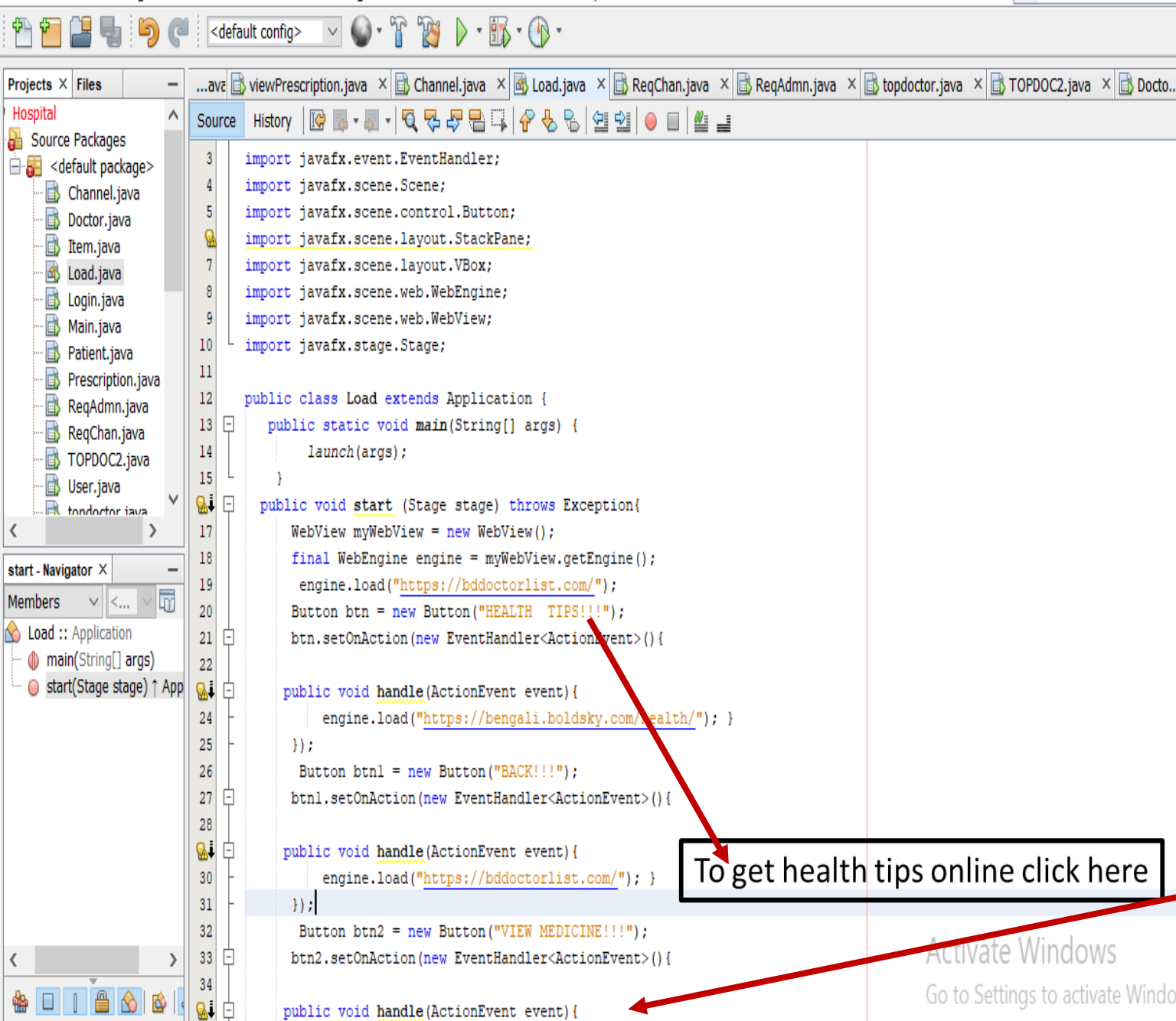VIEW MEDICINE!!!

HEALTH TIPS!!!

BACK!!!

VIEW MEDICINE!!!

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To see various types of medicine online click here

Fig 20—WebView 5- website for searching medicine details available in the market

Fig 21—webview 6—A portion of code for the webview is done with JAVAFx . These websites are third party websites..
Not developed by the developer of the code .(DONE USING API)

To get health tips online click here

To see various types of medicine online click here

Fig 22—Database (MySql) –showing the TABLES used in the database to run the application. JDBC mysql rar file had been imported to the library of this JAVA application at first. Then all the data tables were made manually by the developers of the application

Schema Diagram
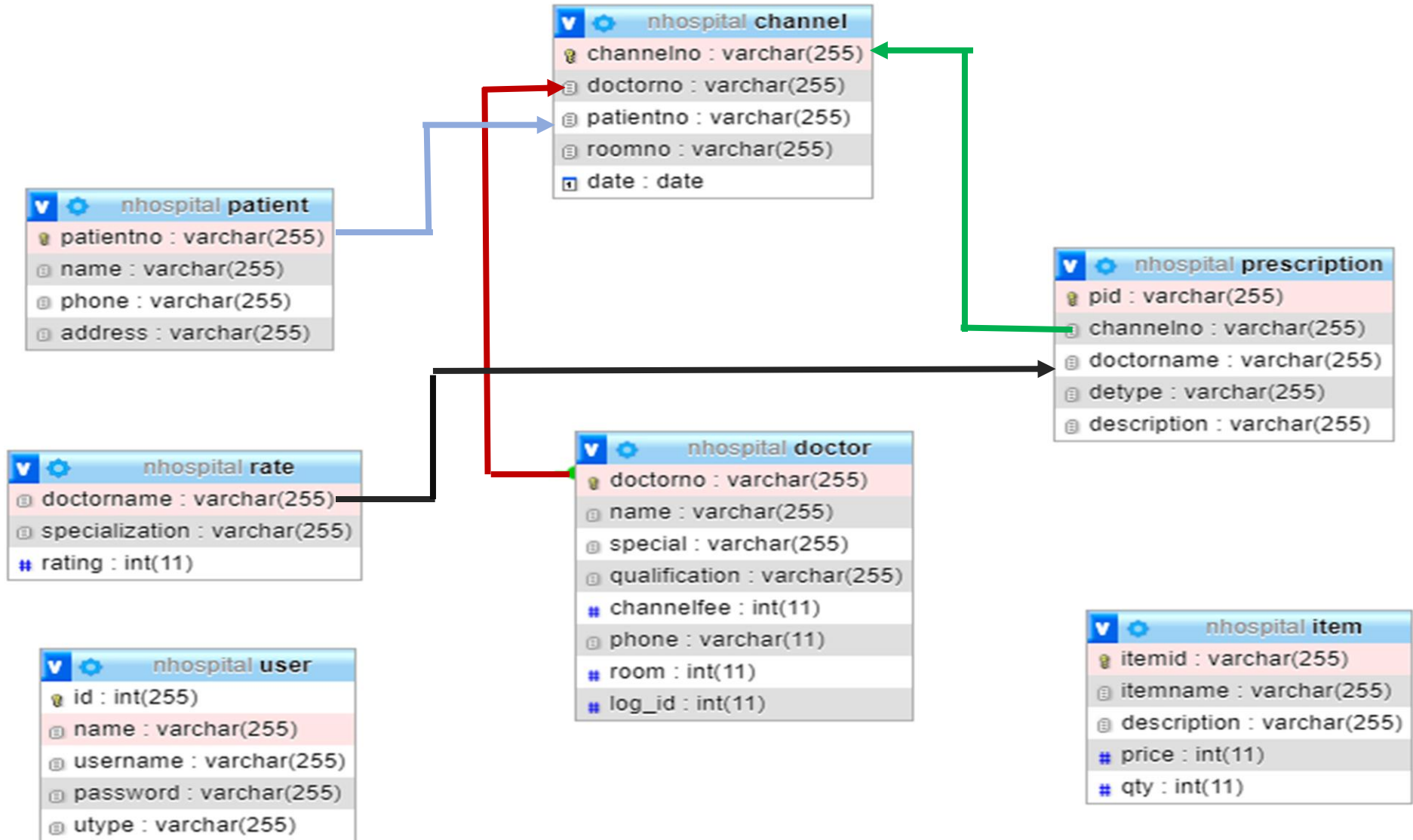
Target vs. Actual Accomplishment

At the beginning of developing the application I have some ideas to implement in this application. **Almost all the features has been added** to this software as possible I could. But two features could not be added to this application . One is the use **of GOOGLE MAP** to find the doctors easily **in nearest position** of the patients . But it was much difficult in JAVA and also the project **deadline was short**. The another feature I excluded here is the **payment system** of the doctors for the previously said reasons. But I hope this application will **be very useful** for the patients (my targeted users).

Risks **and** Issues

Here in this application we have three different users namely Patients , Doctors , Admin. We collect some data from our users. And store the data in the local database . So there has an issue with data security. Some personal information of our users are been collected by us. If any evil mind takes access to the local server he can steal the information of the users. But in developing this application we were concerned to only develop user friendly features for our projects not the security issue of the application. So here comes the risk. But we should be concern about the data security. As data are very much private and important.

Discussion & Conclution

The JAVA DESKTOP application named DOCTOR APPOINTMENT I developed performs mainly the appointment of doctors via online. The main users of this applicaton are the patients. Here they can request for appointment with the doctor they like seeing the doctor profile, rate the doctors, get immediate prescription (always saved in the database) , save the details of medical items they are consuming . Moreover the patients can make the appointments so easily in website integrated with this application, get regular updated health tips, know about the details of any medicine found in this country. These web based feature are added by using API's. Hopefully these features give this application LIFE. The application is very user friendly to use. It has a modest GUI (graphical user interface) that anyone will like . For now my targeted users are the patients. But the doctors and an Admin also uses this application. The role of Admin inn this application is very much important as he controls most of the systems in this application. The main feature the appointment is not confirmed until the Admin don't accepts it.

Here is a security issue discussed in the previous point . As a developer I will try to solve it as much as I can. There are also two features not been added in this application (google map & payment system). I will also try to integrate these two features in near future. And I will keep developing this application to make it a better product. This is only a Demo version for the project.

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THANK YOU