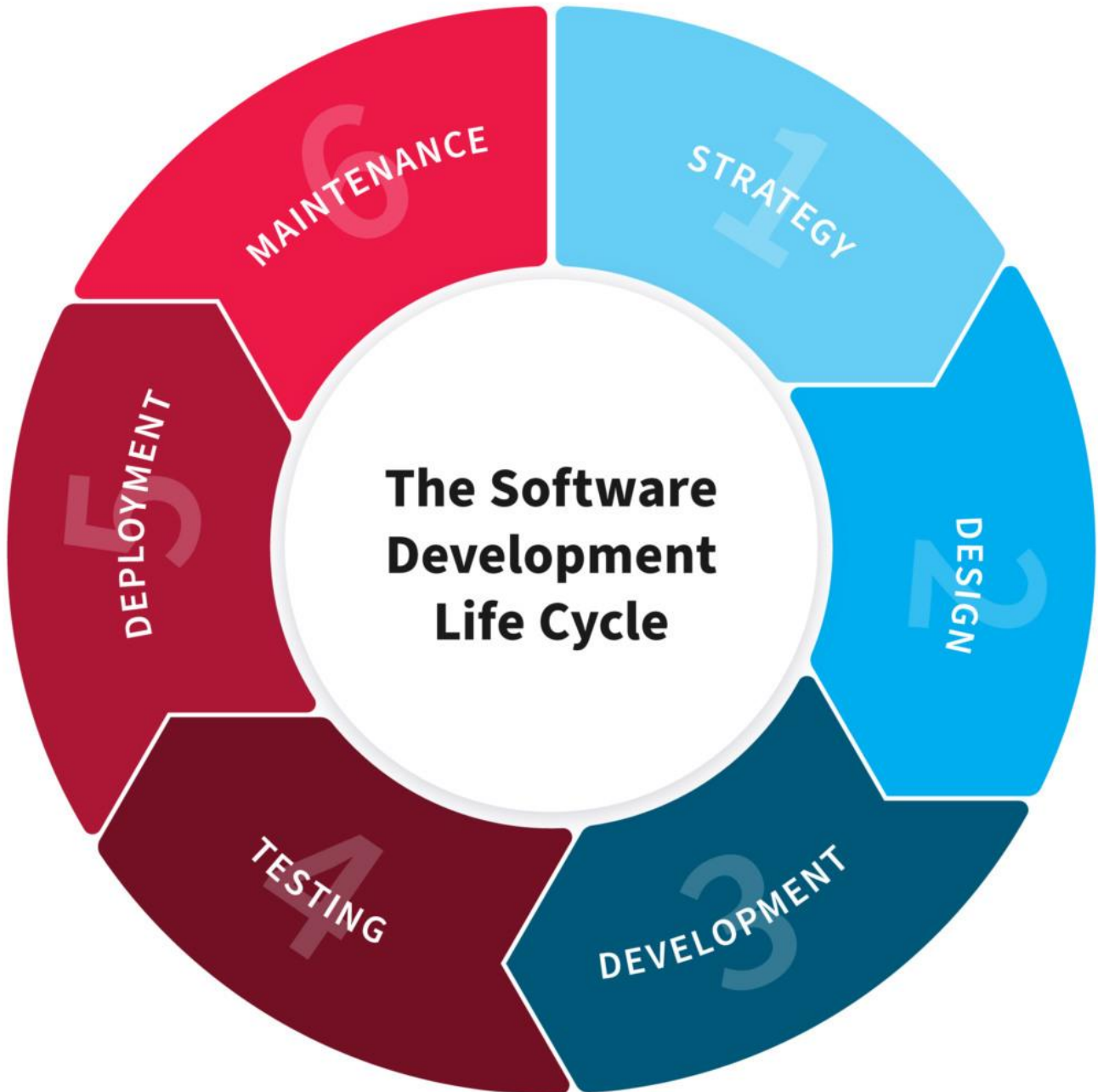


**Format to report your ADVANCED JAVA  
PROGRAMMING PROJECTS**



**NB: EVERY STUDENTS HAS TO PRODUCE THIS DOC**

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## **PROJECT NAME: PREGNANT WOMEN INFORMATION SYSTEM**

### **1.PLANNING.**

PREGNANT WOMEN INFORMATION SYSTEM is project that came up with some helpful solution to pregnant women. It provides necessary information that concerns with pregnancy from 1<sup>st</sup> week to 40<sup>th</sup> week of pregnancy. This will solve the problem of time taken to go to the hospital and parents that are tired of walking to seek that such information, now they can get solutions to their questions whenever and wherever. Users will also be able to ask questions concerns their situations through contacts that are listed in footer and Admins/Doctors will be ready to respond.

Make a Plan and Take Action. ...

See Your Doctor. ...

Take 400 Micrograms of Folic Acid Every Day. ...

Stop Drinking Alcohol, Smoking, and Using Certain Drugs. ...

Avoid Toxic Substances and Environmental Contaminants. ...

Reach and Maintain a Healthy Weight. ...

Learn Your Family History. ...

Get Mentally Healthy.

### **2. DESIGN**

This software consists of two external entities: user and Admins/Doctor.

Users will create an account by filling username; password; email; and the other credentials, then users directed to home page where pregnancy information from 1<sup>st</sup> week to 40<sup>th</sup> week is found.

User will use that information according to her situation whether there is some inconvenience to her situation, she will inform directly the doctor/admin through contacts listed in footer, and admin/doctor will be ready to respond and recommend the user special treatment. Admin/doctor will also create account with required credentials where he/she will get the control of what's going on with the users. Admin/doctor could delete/update users and will also respond users questions.

### **3. Development**

#### *Front-end*

The part of a web site that the users interact with directly is termed as the front-end. It includes everything that users experience directly text colors and styles, images, graphs, and tables, buttons, colors and navigation menu. Html, css, and java script are languages that we used in front-end development.

HTML: stand for hypertext markup language. It is used to design the front end portion of webpages using a markup language. It is combination of hypertext and markup language, hypertext defines the link between web pages.

CSS: cascading style sheet fondly referred to a CSS is simply designed languages intended to simplify the process of making web pages presentable. It helped us to apply style to web page.

JAVA SCRIPT: used to create magic on the site to make the site interactive for the user. It was used to enhance the functionality if a website to run web-based software. But we used java for both front-end and back –end.

#### *Back-end*

The back-end is the saver side of the website it stores and arranges data and also makes sure everything on the client-side of the website works fine. Her we used JSP and Savlet technologies to perform activities like writing APIs, creating libraries and working with system components without user interfaces or even systems of scientific programming and crud operations ( create, read, update, delete).

### *Libraries*

We used com.mysql.jdbc\_5.1.5.jar as library handling MYSQL connection with the system.

### *Storage and database*

We used MYSQL a database management system to store data from back-end operations

The other technologies that were used in our project are xampp as server, MYSQL as a database and eclipse as Ide.

## **4. Testing**

Testing enables teams to identify and address potential problems before they affect users. We followed six key phases of the software testing lifecycle:

### **1. Requirement analysis**

During this phase, we mapped the environments in which the software will run and determine who will use the app. We considered any possible outcome that can occur, both immediately and in the future.

### **2. Test planning**

Here is when we thought about what's needed to complete the test and meet objectives. We considered the following:

- what is needed to test an application that's running in Pregnancy information
- whether it's necessary to test how the application will scale;
- how many users can access the application before it scales; and
- how many resources the application has before scaling out,....

### **3. Test case development**

After planning our tests -- and what we will test -- we determined the technical details for each test case. For example, if it is necessary to deploy an application to pregnancy

to test it, we needed pregnancy manifest and some automation scripts to get the application up and running.

#### **4. Test environment setup**

In this stage of the software testing lifecycle, we identified where the tests will run. For example, Rwandan population is needed to perform testing, we implemented one of the several options to deploy one which is Huye district population.

#### **5. Test execution**

We have shared access to the testing environment and associated code. Contrastingly, it's not a best practice for team members to all store code on our local computers.

#### **6. Test reporting**

Without reports, tests aren't entirely helpful. We used test report to understand if an application works as expected.

### **5.Deployment**

- we Adopted Continuous Delivery
- we used an automated Software Deployment Process
- we Create a Checklist for Deployment
- we Made a Backup Plan
- Selected the Most Appropriate Deployment Method by implementing software that is simple to integrate with other tools and existing local applications.
- Used a Continuous Integration Serve. This ensures that the generated application will run on a developer's system, as well as avoid "integration hell."