

# Department of Computer Science and Engineering Walchand College of Engineering, Sangli

## **Mini Project**

Life\_Care : A Online Blood Donor Application

T.Y in Computer Science and Engineering

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## **Project Guide**

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**Academic Year** 

2016-2017



## Department of Computer Science and Engineering Walchand College of Engineering, Sangli

#### **CERTIFICATE**

This is to certify that the Third year B.Tech. Project entitled "Life_Care: A Online Blood Donor				
Application" submitted by				
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for the partial fulfillment of the requirement for the award of the degree of Bachelor of Computer Science and Engineering of the Walchand College of Engineering, Sangli is a bonafide work carried out during academic year 2016-17.

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1	
2	
Date:19/11/2016	

Place:Sangli

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#### **Abstract**

This Application will help patients who are in need of Blood it will give the Donors address to Patient with information . This app coneects directly to willing Donors and patient .Features of the LifeCare App are:

- Free Registration
- Search for the Blood present in nearby area and get location .
- Main thing is that Patient gets Donors address, contacts no, Age. .

The LifeCare app can be great help to needy people to search blood in nearby area and is simple and easy task.

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#### **CHAPTER 2**

#### **Overall Discription**

#### 2.1 Product perspective

The aim of the LifeCare is to simplify and automate the process of searching for blood in case of emergency and maintain the records of blood donors, blood donation programs .

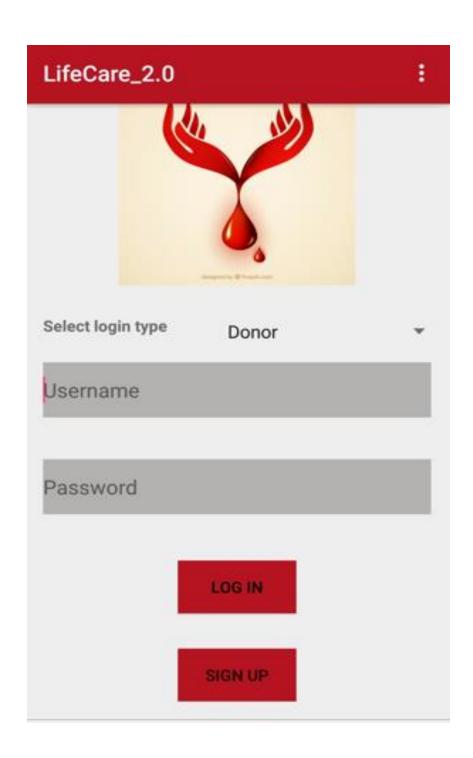
#### 2.2 Product Functions

The LifeCare application has a very simple working. Firstly. Both Patient and Donor needs to Sign Up and then Sign In . Patient need to request for Blood and it will give all available Donor for Blood Group. It shows you information of Donors. Patient need to respond Donor...

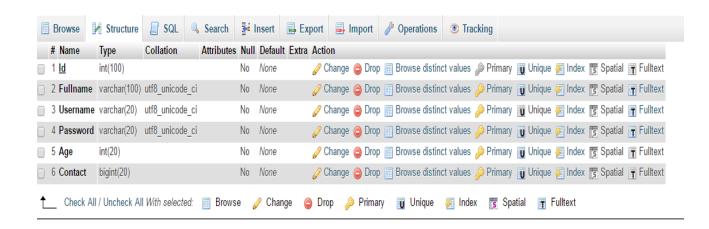
#### **User Panel**

#### Home

- This consists of various options for users like:
- Search for Blood.
- Help through Location.



# LifeCare\_2.0 full\_name Rutuja Mailare Username Rutuja Password Retype Password Contact number 9545535252 Age 19 SUBMIT





#### **Uml Diagrams**

UML stands for Unified modelling language. The UML diagram are mandatory for a programmer to understand the project thoroughly. UML diagrams include static diagrams and the interaction diagrams.

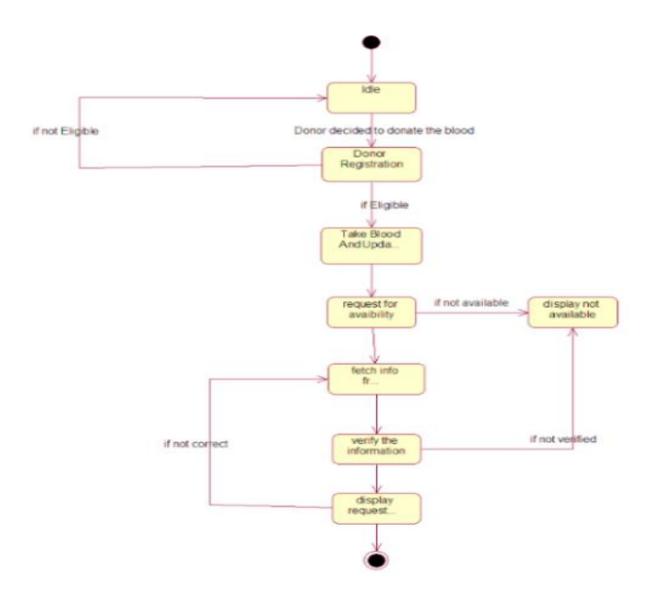
Here we have described the major UML diagrams for the Smart Class application.

#### 1.Class Diagram

- Class diagram is a static diagram.
- It includes classes and relationships between them.
- The classes are shown by boxes which are partitioned into three sections: Class name, attributes and functions.
- The relationships between classes are shown by arrows. The arrows can be named to give more details of the type of relationship.

#### 2.Activity diagram

- Activity diagram is basically a flow chart to represent the flow form one activity to another activity.
- The activity can be described as an operation of the system.
- So the control flow is drawn from one operation to another. This flow can be sequential, branched or concurrent.
- Activity diagrams deals with all type of flow control by using different elements like fork, join etc.



#### 3. Sequence diagram

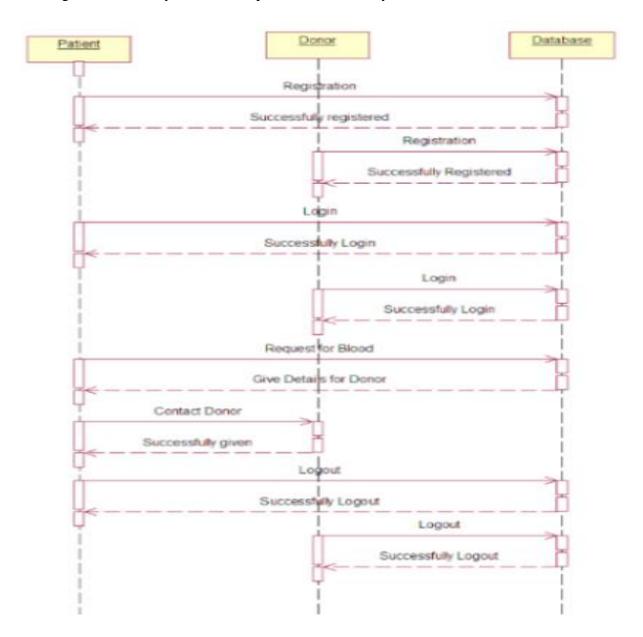
Sequence diagrams are interaction diagrams. Following things are to be identified clearly before drawing the sequence diagram:

- Objects taking part in the interaction.
- Message flows among the objects.
- The sequence in which the messages are flowing.

Object organization.

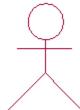
The sequence diagram has lifeline for each participant and the sequence of messages among them.

Messages are shown by lines and responses are shown by dotted lines.



#### 4.Use case diagrams:

- The use case diagrams are interaction diagrams.
- The diagrams are composed of the actors and use cases.
- The actors are shown by the symbol:-



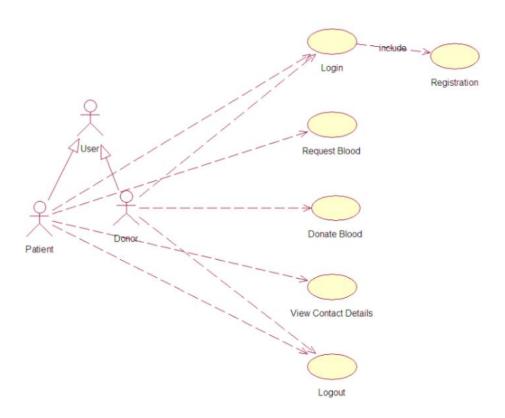
#### Actor

• The use cases are shown by the symbol:



Use Case

• The use cases are connected to the actors by arrows:



#### **System Requirement**

#### **User Interface:**

This Application is an android application. It provides a very clear and simple user interface. The interaction of user with the system has no complex factors as the application is completely user friendly. As all the android users are comfortable with the view of the android interface, LifeCare is much easier.

#### **Hardware Interface:**

This is an android application. Hence it can run only on the android platform, i.e.the system supporting the android platform..

#### **Software interface:**

The LifeCare is an android application which runs on a very wide range of android sdk versions.

- > The supportable android versions are as follows:
  - Min. supportable version:
  - Max.Supportable version:
- > The languages used in the development of SAYA are:
  - Java
  - PHP
  - XML
- The database used, where all the records are stored, updated and retrieved

#### 4. System Testing

System testing is the stage of implementation, which is aimed at ensuring that the system works accurately and efficiently before live operation commences. The ultimate aim is quality assurance. Tests are carried out and the results are compared with the expected document. In the case of erroneous results, debugging is done. Using detailed testing strategies a test plan is carried out on each module. The various tests performed are unit testing, integration testing and user acceptance testing.

#### 4.1 Unit Testing

The software units in a system are modules and routines that are assembled and integrated to perform aspecific function. Unit testing focuses first on modules, independently of one another, to locate errors. This enables, to detect errors in coding and logic that are contained within each module. This testing includes entering data and ascertaining if the value matches to the type and size supported by java. The various controls are tested to ensure that each performs its action as required.

#### 4.2 Integration Testing

Data can be lost across any interface, one module can have an adverse effect on another, sub functions when combined, may not produce the desired major functions. Integration testing is a systematic testing to discover errors associated within the interface. All the modules are combined and tested as a whole.

#### 4.3 User Acceptance Testing

User acceptance of a system is the key factor for the success of any system. The system under Consideration is tested for user acceptance by constantly keeping in touch with the system users at time of developing and making changes whenever required.

#### 5.Implementation

Implementation is the stage in the project where the theoretical design is turned into a working system and is giving confidence on the new system for the users that it will work efficiently and effectively. It involves careful planning, investigation of the current system and its constraints on implementation, design of methods to achieve the changeover, an evaluation of change over methods.. The implementation process begins with preparing a plan for the implementation of the system. In **LifeCare**, no additional resources are needed. Implementation is the final and the most important phase.. The system can be implemented only after thorough testing is done and if it is found to be working according to the specification.

#### 5.1 User Training

After the system is implemented successfully, training of the user is one of the most important subtasks of the developer. For this purpose user manuals are prepared and handled over to the user to operate the developed system. In order to put new application system into use, the following activities were taken care of:

- o Preparation of documentation
- o Conducting user training with demo and hands on

#### 5.2 Security and Maintenance

Maintenance means restoring something to its original condition. Maintenance follows conversion to the extent that changes are necessary to maintain satisfactory operations relative to changes in the user's environment. Maintenance often includes minor enhancements or corrections to problems that surface in the system's operation. Maintenance is also done based on fixing the problems reported, changing the interface with other software or hardware enhancing the software.

Any system developed should be secured and protected against possible hazards. Security measures are provided to prevent unauthorized access of the database at various levels.

## Conclusion

This App will be revolutionalise process of finding nearby donors.