Bansilal Ramnath Agarwal Charitable Trust's

VISHWAKARMA INSTITUTE OF INFORMATION TECHNOLOGY, PUNE

DEPARTMENT OF COMPUTER ENGINEERING

PROJECT SYNOPSIS

1 Group Id

SY B.Tech

STUDENTS: - 1) Shantanu Dangat - 223013

2) Ankit Bawanthade - 223002

3) Omkar Kadam - 223027

4) Siddharth Bhosale - 223004

2 Project Title

Data Structure Learning System

3 Project Option

In-House

4 Internal Guide

Mrs. Disha Maind. Mrs. Manisha Mali.

5 Sponsorship and External Guide

6 Technical Keywords (As per ACM Keywords)

- 1. Java/c++
- 2. Android Studio
- 3. JavaFX, Java.swing
- 4. Google Firebase

SYNOPSIS

7 Problem Statement

To build a platform for students to learn Data Structure and algorithms using simple and understandable graphical representation.

8 Abstract

First all the code and algorithms of data structure will be created and tested in android studio using java language. Graphical implementations of the codes will be then created and will be added in the app which in turn will create animation effect. Codes for graphics will be created using swingJavaFx. An UI will be created where the user will see the working of algorithms animated in the upper half of screen. The UI On the lower half to be created where pseudocode/syntax will be shown in a text view.

9 Goals and Objectives

This platform will help students to understand the data structure concepts more easily and efficiently. According to survey a student is able to imagine and grasp the concept more easily with the help of visual aids. Here this Graphical UI will help them to understand the concepts in a better way.