**SIR PADAMPAT SINGHANIA UNIVERSITY**

**Department of Computer Science and Engineering**

**One Week**

**Java GUI Development Training**

**(Swings, JavaFX, JDBC, Hibernate)**

Objective

* Understand the Java Swing Framework
* Learn how to write GUI application in Java
* Discover how to create database application

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| **DAY** | **DETAILED TOPICS** |
| DAY 1 | Introduction to Swings |
| Swing classes and Methods |
| Swings components: JFrame, JLabel, JTextField, JButton |
| Swing Layouts: null layout and Flow Layout |
| Swing Event Handling: ActionListener |
| Creating first GUI application with swings |
| DAY 2 | Swing Components: JCheckBox, JRadioButton, JComboBox, JList, JScrollBar, Jslider, JColorChooser |
| Swing Layouts: GridLayout |
| Swing Event Handling: ItemListener, MouseListener, KeyListener |
| Creating GUI Application |
| DAY 3 | Swing Components: JMenu, JMenuItem, JPopUpMenu, JFileChooser |
| Swing Layouts: BorderLayour |
| SwingListener: WindowListener,MouseMotionListener |
| Creating GUI Application |
| DAY 4 | Introduction to DBMS |
| Installation of ORACLE/MYSQL |
| SQL command: DDL, DQL, DML |
| SQL Constraints: unique, primary key, foreign key, check, default, not null |
| SQL Functions |
| DAY 5 | Introduction to JDBC |
| JDBC Drivers |
| Establishing Connection with ORACLE/MYSQL database |
| Statement and Prepared Statement |
| ResultSet |
| CRUD Operation |
| Creating Database application |
| DAY 6 | Introduction to JavaFX Frame work |
| Creating basic application using JavaFX |
| Intoduction to Hibernate |
| Creating Application using hibernate |
| DAY 7 | Assessment and Mini Project |