

Agenda

- Main Functions of Code
- Key Components
- How DateSheet Builder Look's

Main Functions of The Code...

- The class DateSheetBuilder is used to create a Simple Application for Building a Date Sheet.
- 2. It allows users to input **subject names** and their respective **start dates** and displays them in a table format.

```
public class DateSheetBuilder extends JFrame {
    private List<Exam> exams;
    private DefaultTableModel tableModel;
    private JTextField subjectNameField;
    private JTextField startDateField;
    private JTable table;

public DateSheetBuilder() {
        exams = new ArrayList<>>();
        setTitle("Datesheet Builder");
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setSize(800, 300);
        setLayout(new BorderLayout());
```

Key Components

- Exam Class
- CenterBoldTableCellRenderer Class
- DateSheetBuilder Class (Main Class)
 - Exams
 - Table Model
 - Subject Name Field
 - Start Date Field
 - Table
 - Add Exam Button

Exam Class

```
class Exam {
   private String subjectName;
    private String startDate;
    public Exam(String subjectName, String startDate) {
        this.subjectName = subjectName;
        this.startDate = startDate;
    public String getSubjectName() {
        return subjectName;
   public String getStartDate() {
        return startDate;
```

This class represents an exam class with attributes for subject name and start date.

CenterBoldTableCellRenderer Class

This class is a custom cell renderer used to **center-align** and make **text bold** in table cells.

```
class CenterBoldTableCellRenderer extends DefaultTableCellRenderer {
    public CenterBoldTableCellRenderer() {
        setHorizontalAlignment(SwingConstants.CENTER);
        setFont(getFont().deriveFont(Font.BOLD));
    }
}
```

DateSheetBuilder Class (Main Class):

This class represents the main application window and contains the following components:

```
public class DateSheetBuilder extends JFrame {
    private List<Exam> exams;
    private DefaultTableModel tableModel;
    private JTextField subjectNameField;
    private JTextField startDateField;
    private JTable table;

public DateSheetBuilder() {
        exams = new ArrayList<>();
        setTitle("Datesheet Builder");
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        setSize(800, 300);
        setLayout(new BorderLayout());
```

```
JPanel inputPanel = new JPanel(new FlowLayout());
JLabel subjectLabel = new JLabel("Subject Name:");
JLabel startDateLabel = new JLabel("Start Date (DD-MM-YYYY):");
subjectNameField = new JTextField(15);
startDateField = new JTextField(15);
JButton addButton = new JButton("Add Exam");
addButton.addActionListener(new ActionListener() {
     @Override
     public void actionPerformed(ActionEvent e) {
         addExam();
     }
});
```

Add Exam Button

Allows Users to Add the Subject to the Table

```
JButton addButton = new JButton("Add Exam");
addButton.addActionListener(new ActionListener() {
    @Override
    public void actionPerformed(ActionEvent e) {
        addExam();
```

How DateSheet Builder Look's

Datesheet Builder

Subject Name:	Start Date (DD-MM-YYYY):	Add Exam
Subject Na	me	Date
Java		18-08-2023
Automat	3	23-08-2023
Microproces	sor	25-08-2023

Thank you!