# Manav Rachna International Institute Of Research And Studies



## SCHOOL OF COMPUTER APPLICATION

MCA - B  1st  SEM

PROJECT REPORT

(Course Code: 6.0CA102C01H)

**SUBMITTED BY:**                                                                      **SUBMITTED TO:**

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```java
import javax.swing.*;

import java.awt.*;

// import java.awt.event.*;

import java.time.LocalDate;

import java.time.Period;


public class AstrologyApp extends JFrame {

    private JTextField nameField;

    private JComboBox<String> dayComboBox;

    private JComboBox<String> monthComboBox;

    private JTextField yearField;

    private JTextArea resultArea;


    public AstrologyApp() {

        initializeUI();

    }


    private void initializeUI() {

        setTitle("Astrology Information System");

        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

        setSize(700, 600);

        setLocationRelativeTo(null);

        setLayout(new BorderLayout(10, 10));


        // Header

        JLabel headerLabel = new JLabel("☀ Astrology Information System ☀", JLabel.CENTER);

        headerLabel.setFont(new Font("Arial", Font.BOLD, 24));

        headerLabel.setForeground(new Color(0, 100, 0));

        headerLabel.setBorder(BorderFactory.createEmptyBorder(15, 0, 15, 0));

        add(headerLabel, BorderLayout.NORTH);
```

```java
        // Input Panel
        JPanel inputPanel = createInputPanel();
        add(inputPanel, BorderLayout.NORTH);


        // Result Area
        resultArea = new JTextArea(15, 50);
        resultArea.setEditable(false);
        resultArea.setFont(new Font("Consolas", Font.PLAIN, 14));
        resultArea.setBackground(new Color(255, 255, 240));
        resultArea.setBorder(BorderFactory.createTitledBorder("Astrology Results"));


        JScrollPane scrollPane = new JScrollPane(resultArea);
        add(scrollPane, BorderLayout.CENTER);


        // Button Panel
        JPanel buttonPanel = createButtonPanel();
        add(buttonPanel, BorderLayout.SOUTH);
    }

    private JPanel createInputPanel() {
        JPanel panel = new JPanel(new GridLayout(4, 2, 10, 10));
        panel.setBorder(BorderFactory.createTitledBorder("Enter Your Details"));


        panel.add(new JLabel("Full Name:"));
        nameField = new JTextField();
        panel.add(nameField);


        panel.add(new JLabel("Birth Day:"));
        dayComboBox = new JComboBox<>();
        for (int i = 1; i <= 31; i++) dayComboBox.addItem(String.valueOf(i));
        panel.add(dayComboBox);
```

```java
        panel.add(new JLabel("Birth Month:"));

        monthComboBox = new JComboBox<>(new
String[]{"January","February","March","April","May","June","July","August","September","October",
"November","December"});

        panel.add(monthComboBox);


        panel.add(new JLabel("Birth Year:"));

        yearField = new JTextField("2000");

        panel.add(yearField);


        return panel;

    }


    private JPanel createButtonPanel() {

        JPanel panel = new JPanel(new FlowLayout());


        JButton calculateButton = new JButton("Get Astrology Info");

        calculateButton.addActionListener(e -> calculateAstrology());


        JButton clearButton = new JButton("Clear");

        clearButton.addActionListener(e -> clearFields());


        panel.add(calculateButton);

        panel.add(clearButton);


        return panel;

    }


    private void calculateAstrology() {

        try {

            String name = nameField.getText().trim();
```

```java
            int day = dayComboBox.getSelectedIndex() + 1;

            int month = monthComboBox.getSelectedIndex() + 1;

            int year = Integer.parseInt(yearField.getText().trim());


            if (name.isEmpty()) {

                JOptionPane.showMessageDialog(this, "Please enter your name");

                return;

            }


            String zodiacSign = calculateZodiac(day, month);

            String chineseZodiac = calculateChineseZodiac(year);

            String birthstone = getBirthstone(calculateZodiacIndex(day, month));


            String result = " ✨  ASTROLOGY REPORT ✨ \n" +

                    "====================\n\n" +

                    "Name: " + name + "\n" +

                    "Birth Date: " + day + "/" + month + "/" + year + "\n" +

                    "Age: " + calculateAge(day, month, year) + " years\n\n" +

                    "Sun Sign: " + zodiacSign + "\n" +

                    "Chinese Zodiac: " + chineseZodiac + "\n" +

                    "Birthstone: " + birthstone + "\n" +

                    "Lucky Number: " + ((day + month) % 9) + "\n";


            resultArea.setText(result);


        } catch (Exception ex) {

            JOptionPane.showMessageDialog(this, "Please enter valid data");

        }
    }


    private String calculateZodiac(int day, int month) {
```

```java
        if ((month == 3 && day >= 21) || (month == 4 && day <= 19)) return "Aries ♈ ";

        else if ((month == 4 && day >= 20) || (month == 5 && day <= 20)) return "Taurus ♉ ";

        else if ((month == 5 && day >= 21) || (month == 6 && day <= 20)) return "Gemini ♊ ";

        else if ((month == 6 && day >= 21) || (month == 7 && day <= 22)) return "Cancer ♋ ";

        else if ((month == 7 && day >= 23) || (month == 8 && day <= 22)) return "Leo ♌ ";

        else if ((month == 8 && day >= 23) || (month == 9 && day <= 22)) return "Virgo ♍ ";

        else if ((month == 9 && day >= 23) || (month == 10 && day <= 22)) return "Libra ♎ ";

        else if ((month == 10 && day >= 23) || (month == 11 && day <= 21)) return "Scorpio ♏ ";

        else if ((month == 11 && day >= 22) || (month == 12 && day <= 21)) return "Sagittarius ♐ ";

        else if ((month == 12 && day >= 22) || (month == 1 && day <= 19)) return "Capricorn ♑ ";

        else if ((month == 1 && day >= 20) || (month == 2 && day <= 18)) return "Aquarius ♒ ";

        else return "Pisces ♓ ";
    }


    private int calculateZodiacIndex(int day, int month) {

        if ((month == 3 && day >= 21) || (month == 4 && day <= 19)) return 0;

        else if ((month == 4 && day >= 20) || (month == 5 && day <= 20)) return 1;

        else if ((month == 5 && day >= 21) || (month == 6 && day <= 20)) return 2;

        else if ((month == 6 && day >= 21) || (month == 7 && day <= 22)) return 3;

        else if ((month == 7 && day >= 23) || (month == 8 && day <= 22)) return 4;

        else if ((month == 8 && day >= 23) || (month == 9 && day <= 22)) return 5;

        else if ((month == 9 && day >= 23) || (month == 10 && day <= 22)) return 6;

        else if ((month == 10 && day >= 23) || (month == 11 && day <= 21)) return 7;

        else if ((month == 11 && day >= 22) || (month == 12 && day <= 21)) return 8;

        else if ((month == 12 && day >= 22) || (month == 1 && day <= 19)) return 9;

        else if ((month == 1 && day >= 20) || (month == 2 && day <= 18)) return 10;

        else return 11;
    }


    private String getBirthstone(int zodiacIndex) {
```

```java
        String[] stones = {"Diamond", "Emerald", "Pearl", "Ruby", "Peridot", "Sapphire",
                "Opal", "Topaz", "Turquoise", "Garnet", "Amethyst", "Aquamarine"};
        return stones[zodiacIndex];
    }


    private String calculateChineseZodiac(int year) {
        String[] animals = {"Rat", "Ox", "Tiger", "Rabbit", "Dragon", "Snake",
                "Horse", "Goat", "Monkey", "Rooster", "Dog", "Pig"};
        return animals[(year - 1900) % 12];
    }


    private int calculateAge(int day, int month, int year) {
        LocalDate birthDate = LocalDate.of(year, month, day);
        return Period.between(birthDate, LocalDate.now()).getYears();
    }


    private void clearFields() {
        nameField.setText("");
        dayComboBox.setSelectedIndex(0);
        monthComboBox.setSelectedIndex(0);
        yearField.setText("2000");
        resultArea.setText("");
    }


    public static void main(String[] args) {
        SwingUtilities.invokeLater(() -> {
            new AstrologyApp().setVisible(true);
        });
    }
}
```

**Astrology Information System**

## Enter Your Details

Full Name: [                    ]

Birth Day: [ 1                  ▼]

Birth Month: [ January          ▼]

Birth Year: [ 2000             ]

## Astrology Results

[Get Astrology Info]  [Clear]

**Astrology Information System**

### Enter Your Details

**Full Name:** faiza

**Birth Day:** 29

**Birth Month:** November

**Birth Year:** 2003

### Astrology Results

```
⬚ ASTROLOGY REPORT ⬚
====================

Name: faiza
Birth Date: 29/11/2003
Age: 21 years

Sun Sign: Sagittarius ⬚
Chinese Zodiac: Goat
Birthstone: Turquoise
Lucky Number: 4
```

[Get Astrology Info]  [Clear]