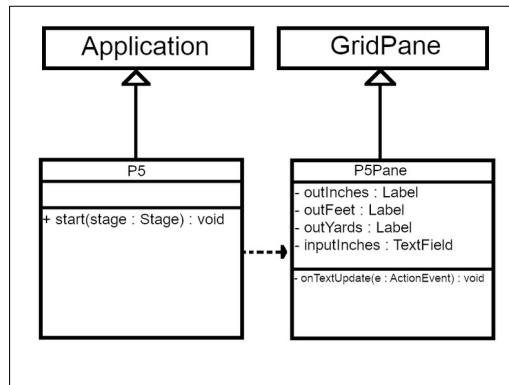
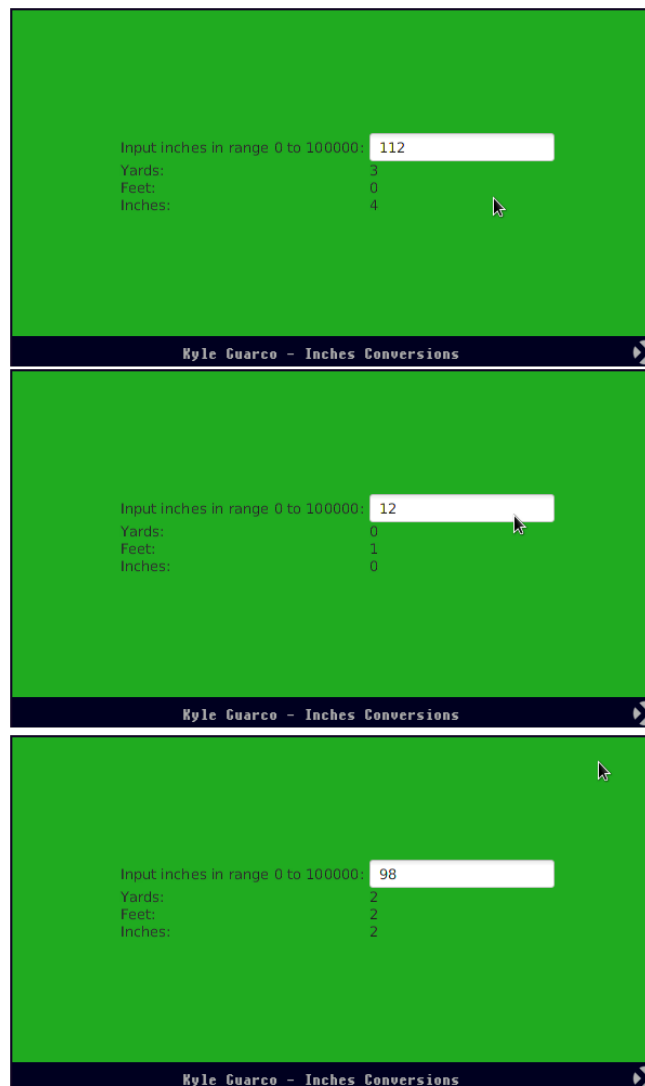


UML



Output



P5.java

```
import javafx.application.Application;
import javafx.scene.Scene;
import javafx.stage.Stage;

/**
 * @author (Kyle Guarco)
 * @version (July 29, 2020)
 */
public class P5 extends Application
{
    @Override
    public void start(Stage stage)
    {
        // JavaFX must have a Scene (window content) inside a Stage (window)
        Scene scene = new Scene(new P5Pane(), 600, 300);
        stage.setTitle("Kyle Guarco - Inches Conversions");
        stage.setScene(scene);

        // Show the Stage (window)
        stage.show();
    }
}
```

P5Pane.java

```
import javafx.scene.layout.GridPane;
import javafx.scene.control.TextField;
import javafx.scene.control.Label;
import javafx.event.ActionEvent;
import javafx.event.EventHandler;
import javafx.geometry.Pos;

/**
 * @author (Kyle Guarco)
 * @version (July 29, 2020)
 */
public class P5Pane extends GridPane
{
    private Label outYards, outFeet, outInches;
    private TextField inputInches;

    public P5Pane()
    {
        setAlignment(Pos.CENTER);
        setStyle("-fx-background-color: #20AB20;");

        this.outYards = new Label();
        this.outFeet = new Label();
        this.outInches = new Label();

        this.inputInches = new TextField();
        this.inputInches.setOnAction(this::onTextUpdate);

        Label lblInput = new Label("Input inches in range 0 to 100000: ");
        Label lblYards = new Label("Yards: ");
        Label lblFeet = new Label("Feet: ");
        Label lblInches = new Label("Inches: ");

        add(lblInput, 0, 0);
        add(inputInches, 1, 0);

        add(lblYards, 0, 1);
        add(outYards, 1, 1);

        add(lblFeet, 0, 2);
        add(outFeet, 1, 2);

        add(lblInches, 0, 3);
        add(outInches, 1, 3);
    }
}
```

```
}

// Updates all the conversion labels when the 'inputInches' field is updated.
private void onTextUpdate(ActionEvent e)
{
    int conv = 0;
    try {
        // Make sure the inches input is actually a number.
        conv = Integer.parseInt(inputInches.getText());
    } catch (NumberFormatException ex) {
        return;
    }

    // Modulo takes the remainder from the conversion. Use modulo to find
    // the remainders from each conversion, then use that remainder in the last field.
    int yards = conv / 36;
    conv = conv % 36;
    int feet = conv / 12;
    conv = conv % 12;

    outYards.setText("" + yards);
    outFeet.setText("" + feet);
    outInches.setText("" + conv);
}
}
```