

# ROGER BURNS LANDSCAPING

CIS355A FINAL PROJECT  
PRESENTATION



# INTRODUCTION

- Java is one of the top programming languages in the world
- NetBeans implements exceptional GUI features
- Java can read and write to files
- Java utilizes API connections to databases
- Java implements Event Driven Programming

# YARD ELEMENTS



DIRT



GRASS



GRAVEL



# DESIGN PHASE

- Design is critical to save time
- The client can view the design documents
- Wireframe diagram gives us a target to achieve
- UML Class diagram provides structure for our application

# Wireframe Diagram

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## GUI Design

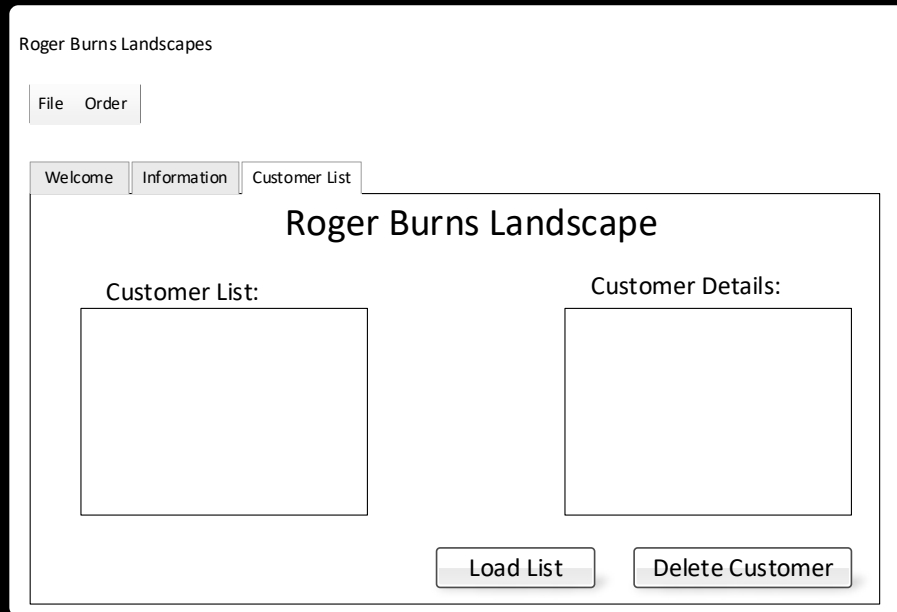
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## Components

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## Layout

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#### Customer

-CustomerID : int  
-name : String  
-address : String  
-yardType : String  
-length : double  
-totalCost : double  
-width : double  
+toString() : String  
+getDetails() : String

#### DataIO

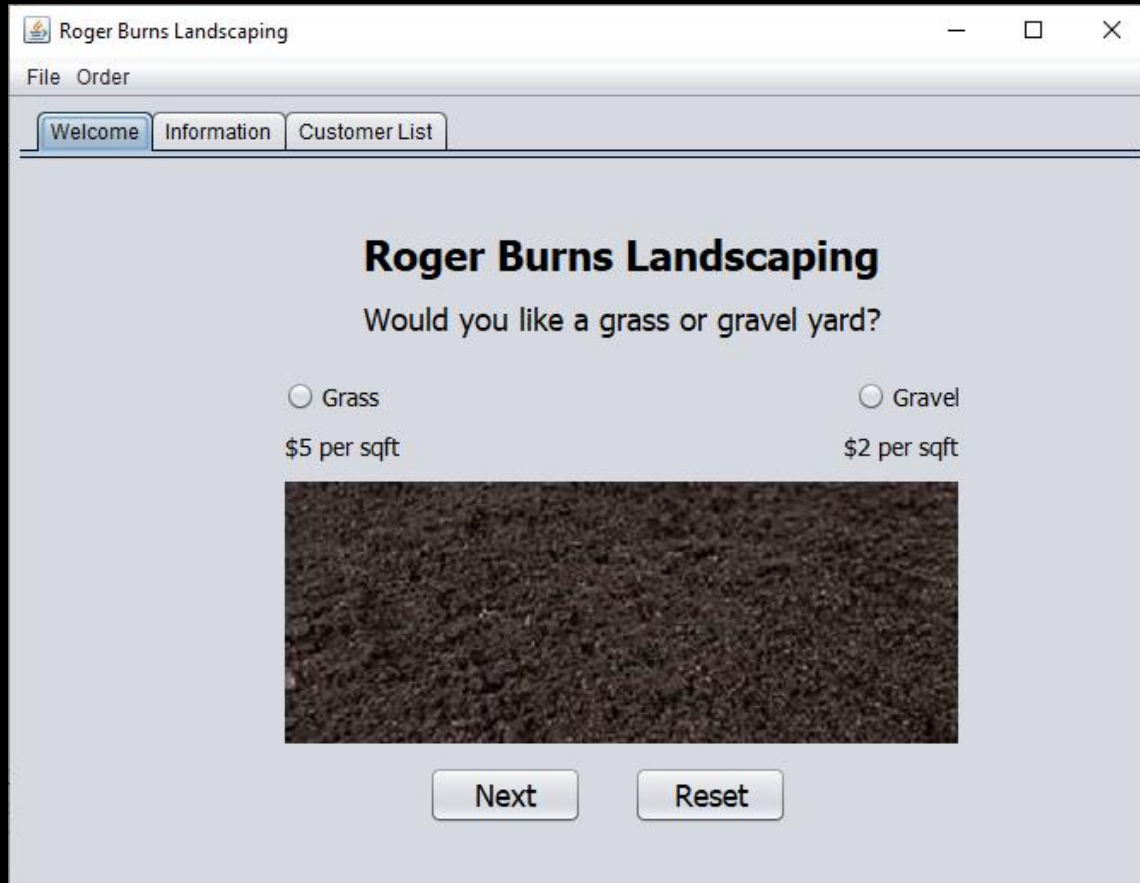
-DATABASE\_NAME: String  
-CONNECTION\_STRING : string  
-USER\_NAME : String  
-PASSWORD : String  
+add(cust : Customer ) : void  
+ delete( customerID : int) : void  
+ getList( ) : ArrayList<Customer>

# UML Class Diagram

## Java Classes

## Object Structure

## Application Structure



GUI

LABELS  
TEXTFIELDS  
BUTTONS  
EVENT HANDLERS

```

* @author Roger Burns
*/
public class LandscapeGUI extends javax.swing.JFrame {

    //class level references
    DefaultListModel<Customer> customerList = new DefaultListModel();
    private final double GRASS_PER_SQFT = 5.00;
    private final double GRAVEL_PER_SQFT = 2.00;

    /**
     * Creates new form LandscapeGUI
     */
    public LandscapeGUI() {
        initComponents();

        //center the form
        this.setLocationRelativeTo(null);
    }

    /**
     * This method is called from within the constructor to initialize the form.
     * WARNING: Do NOT modify this code. The content of this method is always
     * regenerated by the Form Editor.
     */
    @SuppressWarnings("unchecked")
    Generated Code

    private void mniExitActionPerformed(java.awt.event.ActionEvent evt) {
        // exit the application
        System.exit(0);
    }
}

```

# Event Code

CODE DIVIDED INTO  
 METHODS  
 –WRITE ONCE, RUN  
 EVERYWHERE!  
 PULL INPUT FROM TEXTFIELDS  
 PROCESS INPUT  
 SHOW DESIRED OUTPUT



# CHALLENGES

- Code syntax is case sensitive
- Compile errors required debugging skills
- GUI component alignment was trial and error

# CAREER SKILLS

- Designing GUIs in Java
- Designing classes using UML
- Using three-tiered development
  - Using Java syntax
- Debugging applications

# Conclusion

- Java software development is challenging and exciting!
- Designing GUI applications are streamlined with NetBeans IDE
  - Reading and writing to files is important
  - Reading and writing to a database is crucial



# CONTACT US

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