

Dynamic Form Generation

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Database Development
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Requirements

- DatabaseController
- Existing Database
- Scalable layout
- Metadata

Panel Setup

- Spring Layout, FlowLayout
- Matching Label and Field to DB
- Spacing!!
- Problems with TOO MUCH on a page
- Organize by type/topic
- Vertical or Horizontal?
- Single or Multiple entries?

Metadata

- The data behind the data
- What are we storing inside the DB and table?
- Methods
- Standard Java datatypes
 - Use instanceof again

Single Entry Approach

- JTextField and JLabel
- Arrange input fields with labels above/below or to the left.

DynamicProjectNameJPanel

- `setupDynamicPanel()`
 - Iterate over metadata
 - Identify needed components
 - `getColumnType(column#)`
 - `getColumnName(column#)`

DynamicPanel cont'

- Based on the type instantiate components with spacing
 - JTextField, JTextArea, JComboBox
 - Check for proper values if needed
 - JLabel
 - Identify which value is associated with this field

Multiple Entry Approach

- JTable
 - Editable and non-editable fields
 - Alternate color/hue between rows
 - TableCellRenderer – add test in constructor for row/column parameter and call `this.setBackground(someColor)` with a `row % 2 == 0` if/else test
 - Must write `ChangeListener` to submit to `databaseController`