

# Design Patterns: Capstone Assignment 2.3

**Primitive Obsession:** the Dimensions class uses String as the type for the representation of the length, width, and height. Perhaps it would be beneficial to make it generic (template) and use class type which represents a numeric value and unit of measure?

```
/**
 * Dimensions class
 */
public class Dimensions {

    private String length;
    private String width;
    private String height;
```

**Don't repeat yourself (DRY):** the **saveContact()** function is almost identical in both add/edit contact activities, maybe we can use generalization and the template method to refactor this common functionality into a super class? For example, a common sequence of code is observed: begin with input validation and end by invoking finish().

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58 | public void saveContact(View view) {
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60 |     String username_str = username.getText().toString();
61 |     String email_str = email.getText().toString();
62 |
63 |     if (username_str.equals("")) {
64 |         username.setError("Empty field!");
65 |         return;
66 |     }
67 |
68 |     if (!email_str.contains("@")) {
69 |         email.setError("Must be an email address!");
70 |         return;
71 |     }
72 |
73 |     if (!contact_list_controller.isUsernameAvailable(username_str)) {
74 |         username.setError("Username already taken!");
75 |         return;
76 |     }
77 |
78 |     Contact contact = new Contact(username_str, email_str, null);
79 |
80 |     // Add contact
81 |     boolean success = contact_list_controller.addContact(contact, context);
82 |     if (!success) {
83 |         return;
84 |     }
85 |
86 |     // End AddContactActivity
87 |     finish();
88 | }
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96 | public void deleteContact(View view) {
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98 |     // Delete contact
99 |     boolean success = contact_list_controller.deleteContact(contact, context);
100 |     if (!success) {
101 |         return;
102 |     }
103 |
104 |     // End EditContactActivity
105 |     finish();
106 | }
```