

## Code smells

### 1. Data class

**Class:**

Dimensions

**Method:**

All the class methods

**Reason:**

Dimension class deals only with bare data without doing any useful processing or data manipulation.

**Suggestion:**

Adding any form of manipulation on this class data that is being done by other classes to make it more useful, such as creating methods to perform data transformation, rotation, mirroring...

### 2. Duplicate code

**Class:**

ContactList

**Method:**

saveContacts() and loadContacts()

**Reason:**

Exception handling is being duplicated, one time for file opening and the other one for file closing. Changing the exception handling can be complicated especially if there are other exception handlers in other classes use the same duplicated code.

**Suggestion:**

Generalizing the exception handling into one class with different methods to handle the inputs and the outputs, such modification would make any change to be made in one place rather than multiple places in different classes.