

# Programming UI Widgets

# Binding Time

- A loose definition of “binding time” is the point in time when information about a symbolic reference becomes known
- Binding times can be:
  - preprocessor
  - compiler
  - linker
  - class loader
  - runtime

# Binding Time Questions

Give an example of something that is bound at:

- compile time in Java
  
- runtime in Java

# What's going on?

```
private EditText mEditTextNumber1;  
private EditText mEditTextNumber2;  
private EditText mEditTextSum;  
private Button mButtonCompute;  
private Button mButtonClear;
```

...

```
mButtonClear =  
(Button) findViewById(R.id.buttonClear);  
mButtonClear.setOnClickListener(this);
```

# Button CLEAR Functionality

- Let's look at the methods available with an EditText widget
- How can we clear each EditText widget in the MyAddition activity?

# Exception Handling

```
try
{
    // Java Statement
}
catch (NumberFormatException e)
{
    // What to do with exception
}
```

- Never catch and ignore an exception without some kind of documentation
- Don't get lazy and catch a generic Exception if a more specific exception exists

# parseInt

- What is parseInt?
- What kind of exception does parseInt throw?
- Write try/catch code that converts the value of the first number in MyAddition into an int. If an exception occurs, set the number to 0.
- How can you test the exception code?

# Alert Dialog

- What interface do we need to implement?
- What instance variable data type do we need?
- Where does the alert dialog code go in MyAddition? Why?



# Create Alert Dialog

