

# Week 4: Android Views and Widgets

## Selection View/Widget

- **RadioButton**, **CheckBox**: used to select items from a small collection.
- For bigger collections we use **Listbox**, **ComboBox**, **DropDownList**, **PictureGallery**...
- View/Widget that represents a list of options, and can be connected and controlled by an Adapter called **Selection View/Widget**.
- Common Selection View/Widget: **ListView**, **GridView**...
  - **GridView**: a ViewGroup that displays information in rows and columns that can be wrapped.
- **DataAdapter**: a bridge between data source and UI component. Ex: it connects a list of dog breeds and a ListView component, so that the ListView will display a list of dog breeds in the list.

```
ArrayAdapter my_adapter = new ArrayAdapter<String>(this, R.layout.my_list, Dogs);  
// this: the context  
// R.layout.my_list: a layout that represents each item in the Dogs array  
// Dogs: a list containing dog breeds  
  
// find the list and set the adapter  
ListView List = findViewById(R.id.Dog_List);  
List.setAdapter(my_adapter);
```

- Common DataAdapter
  - ArrayAdapter
  - BaseAdapter
  - CursorAdapter
  - SimpleCursorAdapter
  - SpinnerAdapter

- WrapperListAdapter