2.2 EVENT HANDLING

JavaFX in 4 Days

CONTENTS

- What is event?

- How to handle event in JavaFX?

  - Action Method

  - EventHandler

WHAT IS EVENT

- There are two types of Events in JavaFX

- One is user action event, such as mouse event, key events etc.

- The other is it's own value change event

- When event is happened, the registered event handler can be done automatically
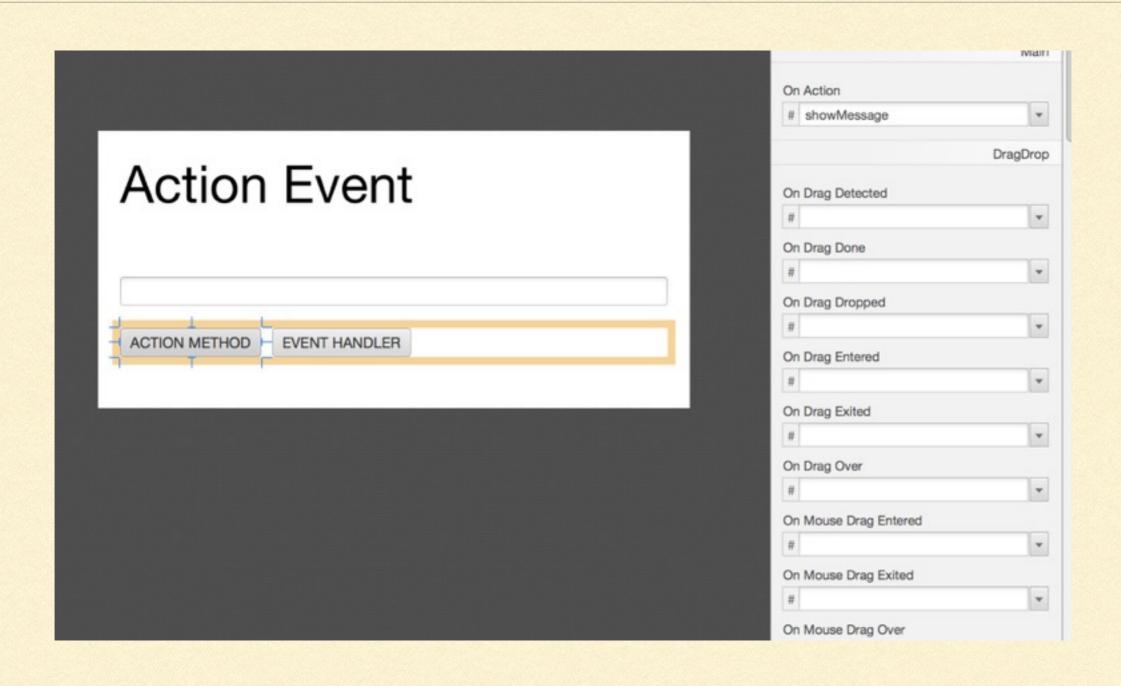
HOW TO HANDLE EVENTS

- Every public void method of controller class can be set as onAction attribute of FXML Nodes

- ButtonBase and it's sub class has setOnAction method and you can set EventHandler object as it's parameter

ACTION METHOD

```java
@FXML
private Text message;
@FXML
private TextField textInput;

@Override
public void start(Stage primaryStage) throws Exception {
    Parent root = FXMLLoader.load(getClass().getResource(FXML_FILE));
    Scene scene = new Scene(root);
    primaryStage.setScene(scene);
    primaryStage.show();
}

public void showMessage() {
    message.setText(textInput.getText());
}
```

USING ACTION METHOD

EVENT HANDLER

```java
@FXML
private Button btn;

@Override
public void initialize(URL location, ResourceBundle resources) {

    btn.setOnAction(new EventHandler<ActionEvent>() {

        @Override
        public void handle(ActionEvent event) {
            showMessage();
        }
    });
}
```

VALUE CHANGE EVENT

```java
@FXML
private ChoiceBox<Browser> choice;
@FXML
private ImageView img;
@FXML
private Text text;

@Override
public void initialize(URL location, ResourceBundle resources) {
    choice.getItems().addAll(browsers());

    choice.valueProperty().addListener((a, b, c) -> {
        Image image = new Image(getClass()
                .getResourceAsStream(c.getImgPath()));
        img.setImage(image);
    });

    img.setOnMouseClicked(a ->
        text.setText(choice.getSelectionModel()
                .getSelectedItem().getName()));
}
```

VALUE CHANGED