



X02 JavaFX 2

JavaFX and Event Handling

Event Handling

Event handling is another control flow construct.

- Branches (a conditional or switch selects control flow)
- Loops (a loop repeats control flow)
- Methods (a method call nests control flow)
- Events (the occurrence of event changes control flow)
 - Event handling in UIs
 - Exception handling (later)

Events and Passing Code in Java

An event handler executes some code when an event occurs.

Q: How do we pass code as an argument in Java?

A: We pass *objects*, which implement *interfaces* through *methods*.

JavaFX event handler interfaces are functional, so we can use lambda expressions.

Events in JavaFX

- Events are instances of `javafx.event.Event`
 - Have Event type, Source, Target
- Event handlers implement `javafx.event.EventHandler`
 - Functional interface, with method `void handle(Event)`.
- An event handler can be created with a lambda expression, for example:

```
scene.setOnKeyTyped(event -> { ...code... })
```

(or a nested class, an anonymous inner class, ...)