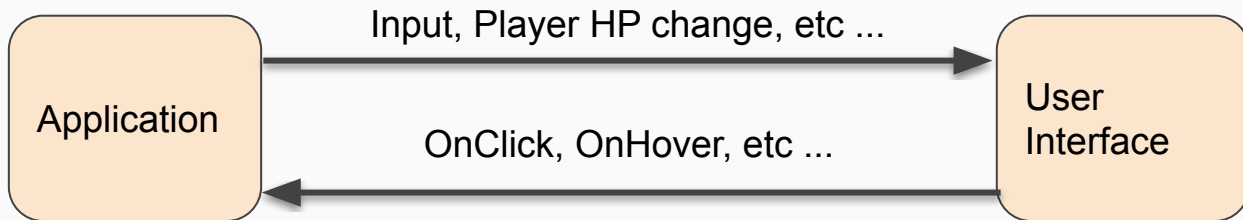# Game Dev

UI Input

Input & UI

Some basics:

- Have debug functionality that draw all rectangles that the UI uses (use F8)

- Remember: there must be communication between UI and other modules

Introducing the Observer Pattern

- We should have a way for the UI to notify new events.

- We can store a pointer to any module that wants to receive them.

- Any module can register as the listener.

- Once the UI detects a new event, it notifies the listener.

- Each module can handle the events individually.

Input & UI

- We want our UI to react to Input Events in different ways:
  - When mouse clicks on the rectangle
  - When mouse enters/leaves the rectangle ("hover")
  - What else would you add here ?
- How do we react to those events ?
  - Change the image of the UI (make it "shine")
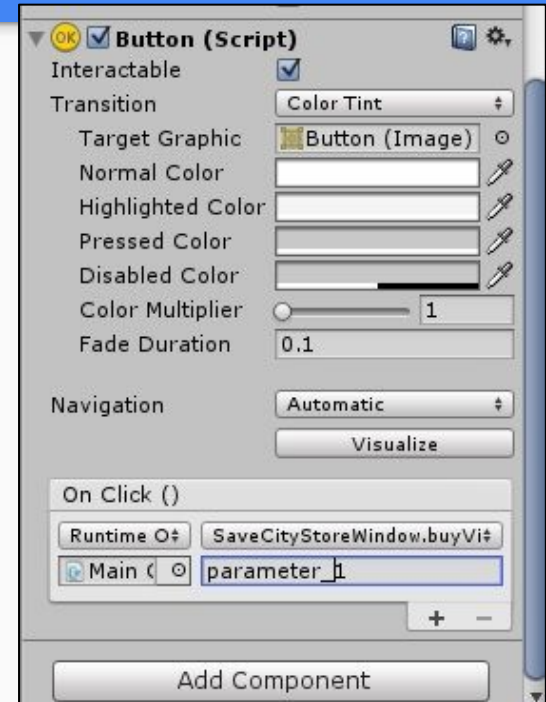 - Execute some logic
  - What else ?

About the solution

Check solution.exe

- Normal Button coords are {0,113,229,69} - hover state

- Bright Button coords are {411,169,229,69} - click state

- Dark Button coords are {642,169,229,69} - normal state

Unity Button Widget

- Check Unity's way to create [UI buttons](#)

- It's simple and allows variety

- What can you replicate ?

Homework

- **UPDATE YOUR UML** with any structural change that you might have done

- You should be able to implement full buttons easily now

  - Try having the buttons with today's functionality embedded (3 sprites)

  - And capabilities to "colorize" any UI (check how rectangles are drawn to see color options)

- Enable that pressing TAB we visit each UI element and give the focus

- Add a new event to receive and lose focus