

Project Journal

Week 1 (Nov. 14, 2021)

- Met at 4pm to kick off the class project.
- Everyone agreed to work on a search algorithms visualizer using processing.
- Assigned XP roles

XP Core Values: **Respect**

- The team met together over zoom and showed up on time.
- Everyone voiced their ideas and suggestions without interruptions.
- No one talked over others.
- Everyone's concerns and questions were answered.

Worked on the following

- Developed a barebone project to get started.
- Designed the keyboard controls and click handlers using observer and chain of responsibility patterns.
- Developed the display views using the composite pattern.
- Added control panel display and grid display on the same main display using composite pattern.

Designs

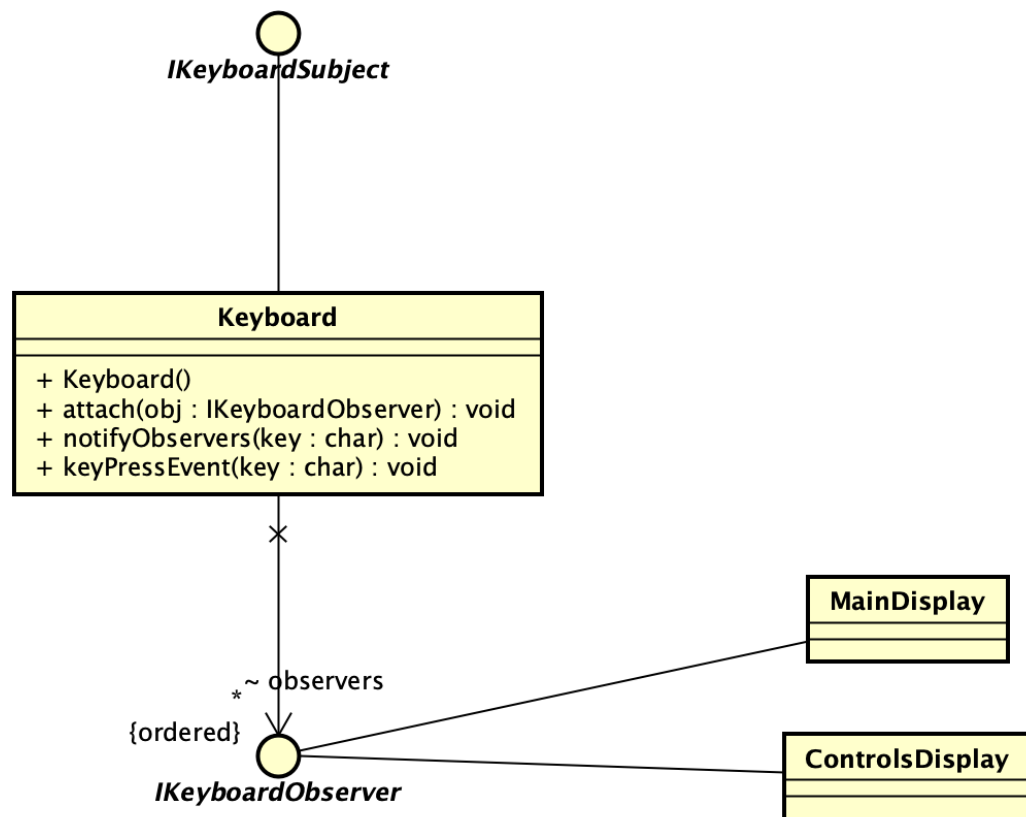
Keyboard Controls

- We need to listen to the keyboard and relay any commands to the keyboard listeners.

Pattern:

- Observer pattern used

Architecture



Click Handler

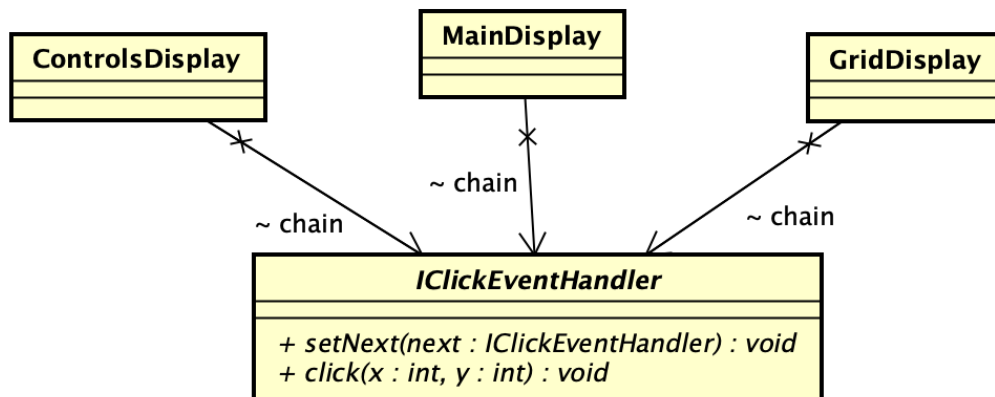
- We need a way to relay mouse clicks to the relevant component. For example, the grid listens for clicks and also, the control panel listens for clicks as well.

Patterns

- Chain of responsibility

Each component that listens for clicks will move the click along its chain of components if the click was not intended for it.

Architecture



Display and Nested Views

- We need a way to handle displays and drawing nested views as well.

Patterns:

- Composite pattern

Views will have nested views, these views can be added to a parent view at run time using the composite pattern.

