MICHIGAN STATE UNIVERSITY

Beta Presentation

clUML: Browser-Based UML Editor

The Capstone Experience

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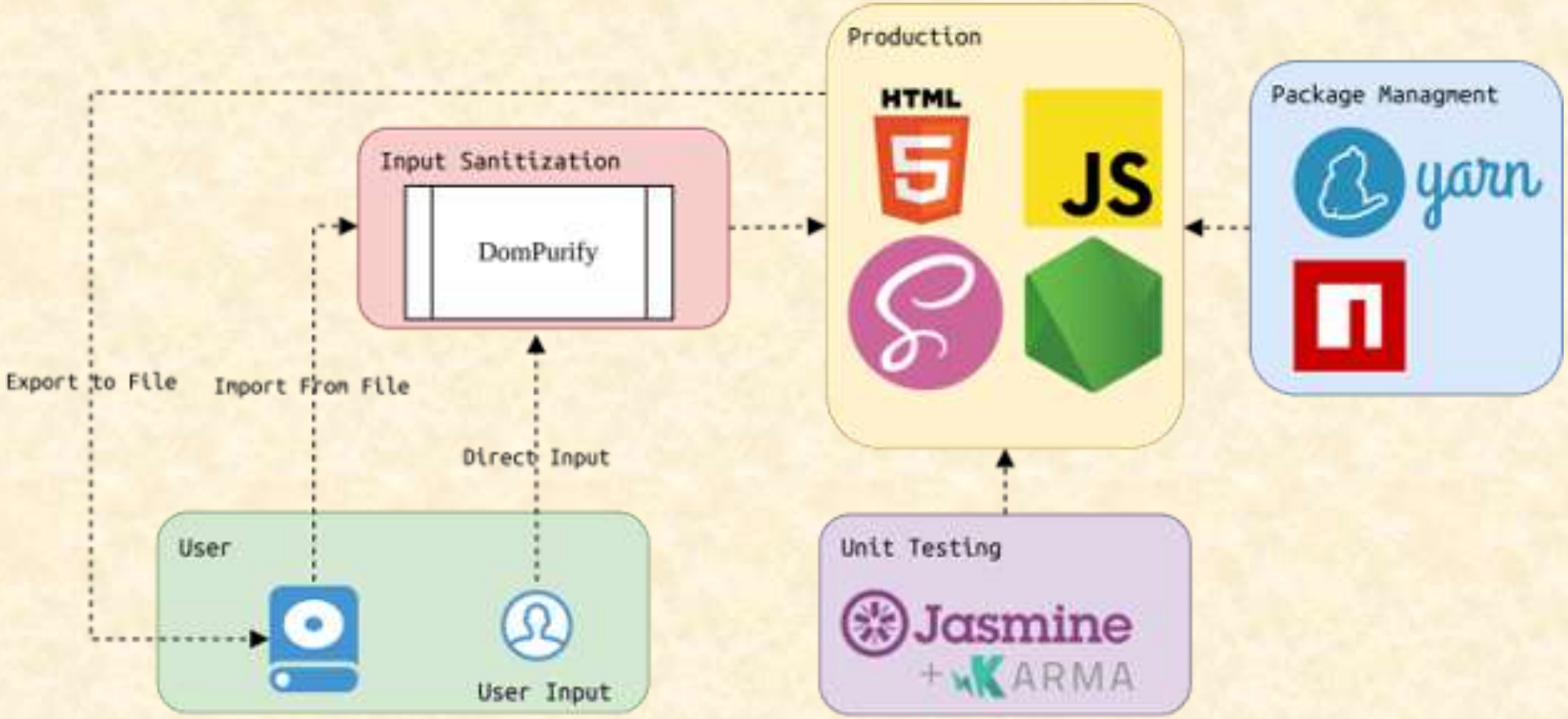
From Students…
…to Professionals

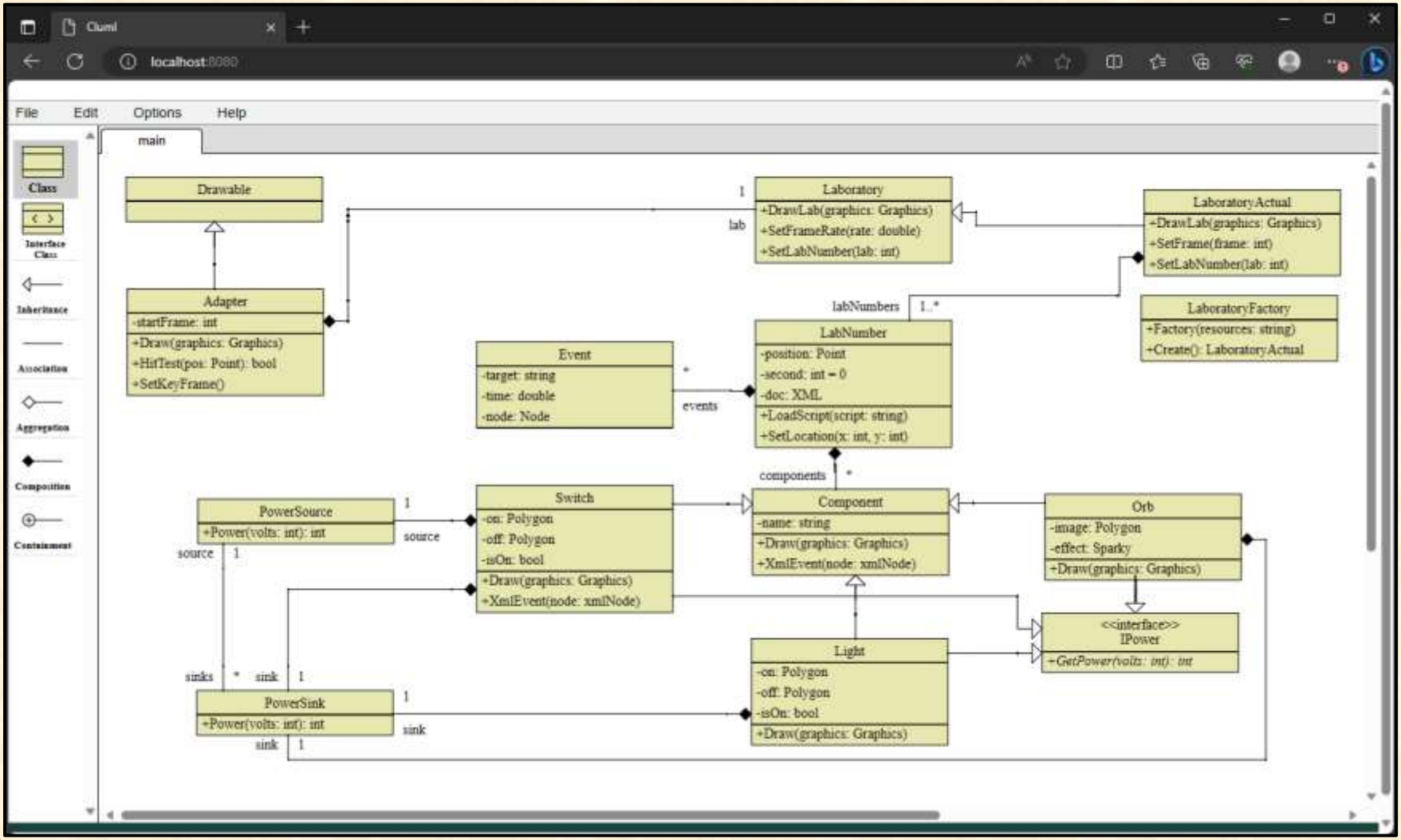
Project Overview

- An easy to use web-based UML editor created for Michigan State University CSE
- To be integrated in CourseLib websites and used in future courses
- Includes a sanity check for common mistakes
- Supports both mouse and touchscreen devices
- One of many interactive programs MSU CSE has created to facilitate student learning

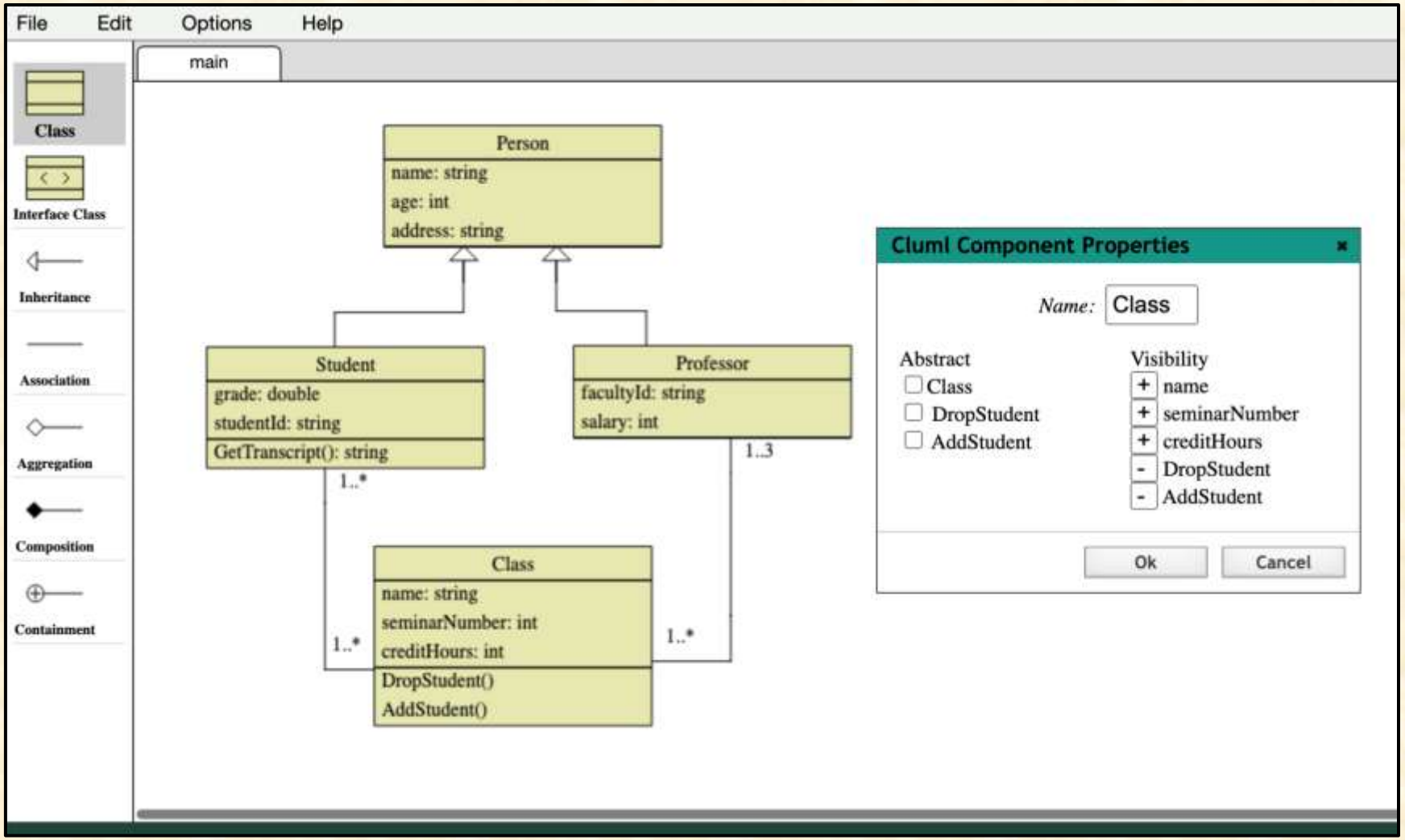
System Architecture



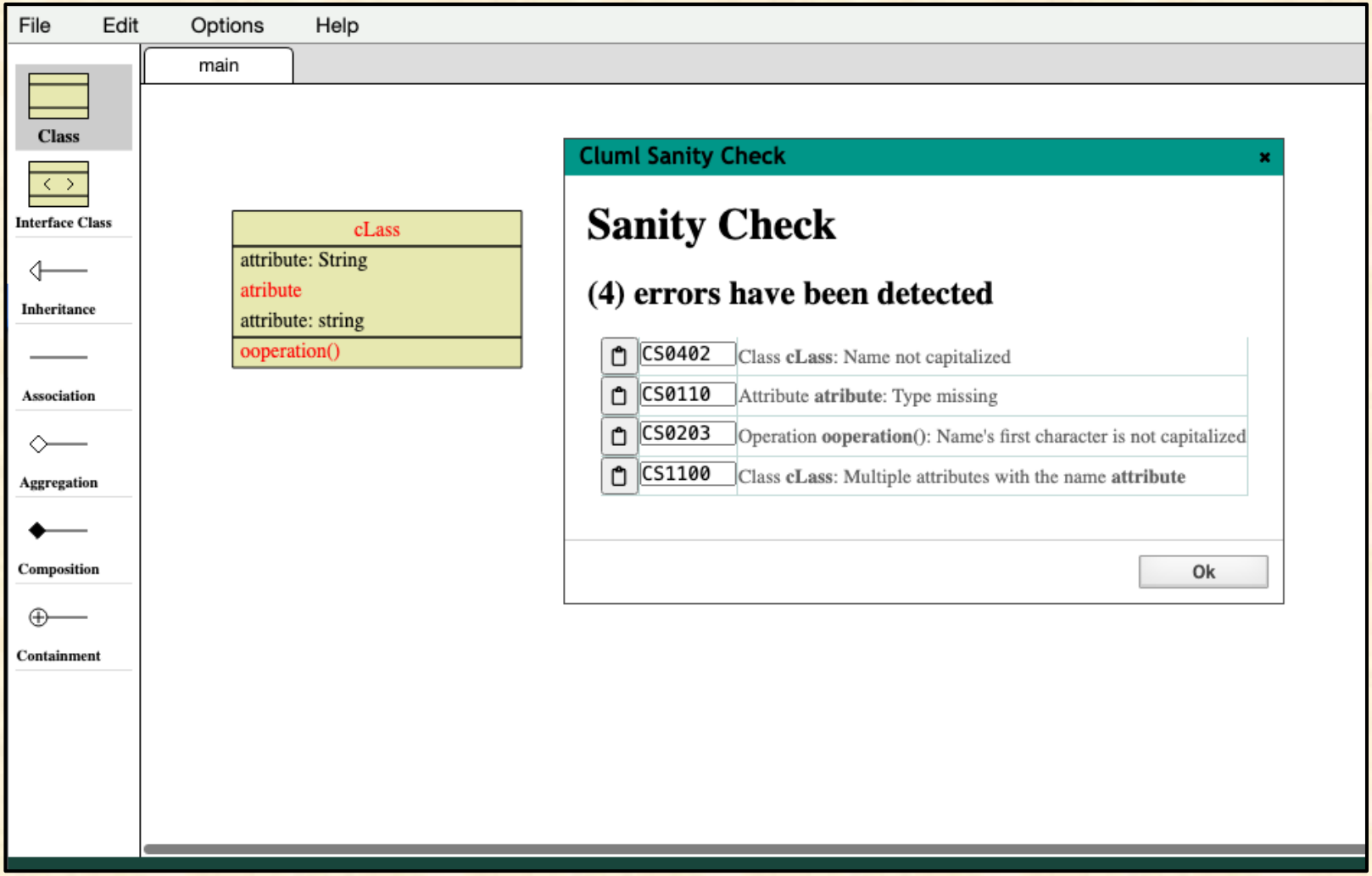
Overview


Cluni
localhost:8080
File
Edit
Options
Help
main
Class
Interface Class
Inheritance
Association
Aggregation
Composition
Containment
Drawable
Adapter
-startFrame: int
+Draw(graphics: Graphics)
+HitTest(pos: Point): bool
+SetKeyFrame()
1
lab
Laboratory
+DrawLab(graphics: Graphics)
+SetFrameRate(rate: double)
+SetLabNumber(lab: int)
LaboratoryActual
+DrawLab(graphics: Graphics)
+SetFrame(frame: int)
+SetLabNumber(lab: int)
labNumbers
1..*
LaboratoryFactory
+Factory(resources: string)
+Create(): LaboratoryActual
Event
-target: string
-time: double
-node: Node
*
events
LabNumber
-position: Point
-second: int = 0
-doc: XML
+LoadScript(script: string)
+SetLocation(x: int, y: int)
components
*
PowerSource
+Power(volts: int): int
1
source
source
1
Switch
-on: Polygon
-off: Polygon
-isOn: bool
+Draw(graphics: Graphics)
+XmlEvent(node: xmlNode)
Component
-name: string
+Draw(graphics: Graphics)
+XmlEvent(node: xmlNode)
Orb
-image: Polygon
-effect: Sparky
+Draw(graphics: Graphics)
<<interface>>
IPower
+GetPower(volts: int): int
sinks
*
sink
1
PowerSink
+Power(volts: int): int
1
sink
sink
1
Light
-on: Polygon
-off: Polygon
-isOn: bool
+Draw(graphics: Graphics)

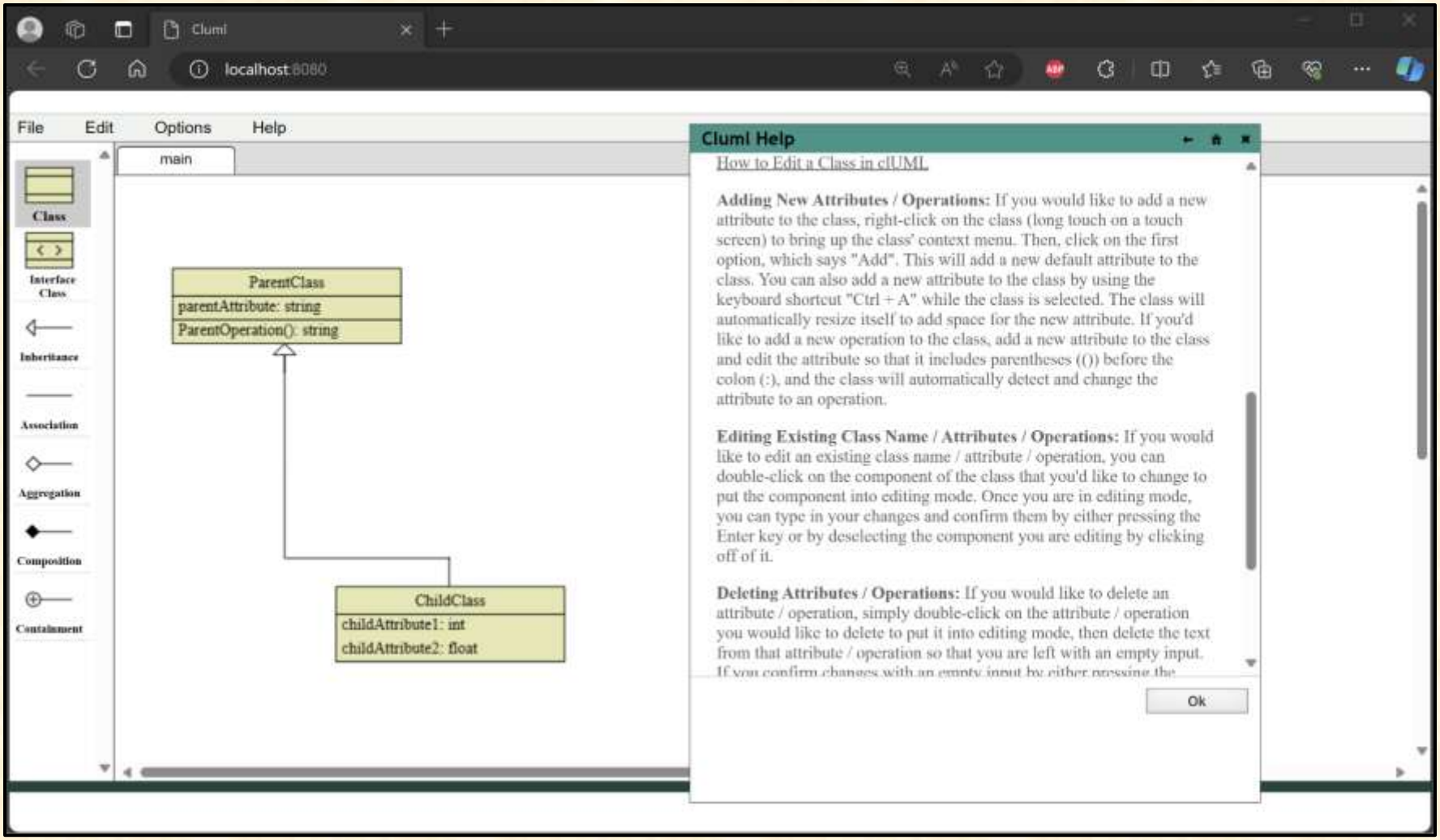
Properties of Classes



Sanity Checking



Help Sections



What's left to do?

- Stretch Goals
  - Allow changing the order of attributes and operations
  - Stereotypes and enumeration
  - Text comments on diagrams
  - Print only the contents of the canvas
- Other Tasks
  - Add manual way to resize classes
  - Finish unit testing for associations

Questions?