

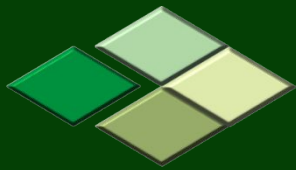
Identifying Design Problems with Code Smell Agglomerations

VISADEP

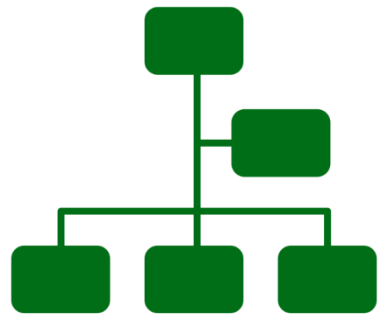
Benedicte Agbachi, Eduardo Fernandes, and
Alessandro Garcia



About VISADEP

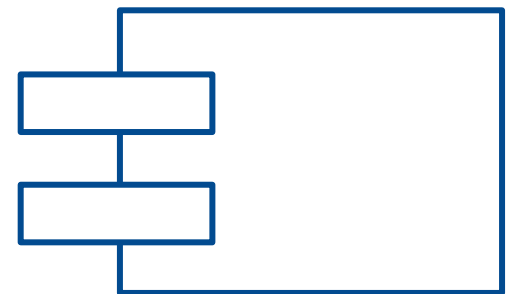


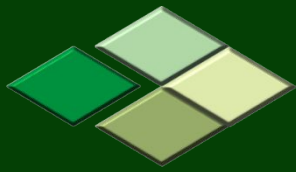
The VISADEP tool



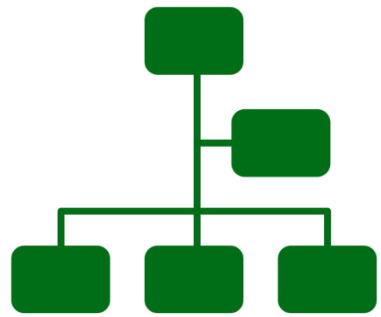
Visualizing code smell
agglomerations in Java systems

Available as an
Eclipse IDE plug-in



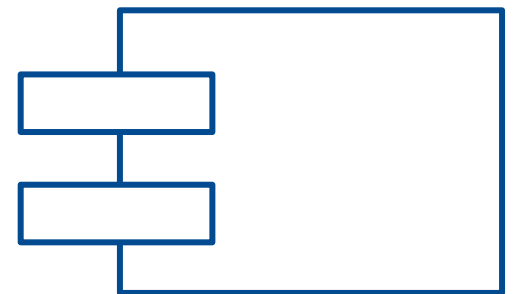


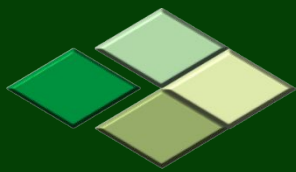
Features of VISADEP



Three abstraction levels:
component, class, and method

+ the list of agglomerated
code smells





VISADEP main screen

List of
agglomerations

Visualizations and other
information

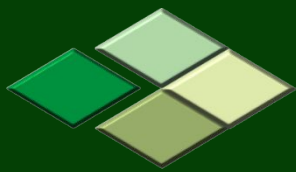
The screenshot shows the VISADEP TOOL interface. The left pane, titled "List of Code Smell Agglomerations by Types for each Project", displays a tree view. The right pane, titled "Information about the Selected Agglomeration", contains tabs for "Component View", "Class View", "Method View", and "Code Smells List".

Project name: workflow-02

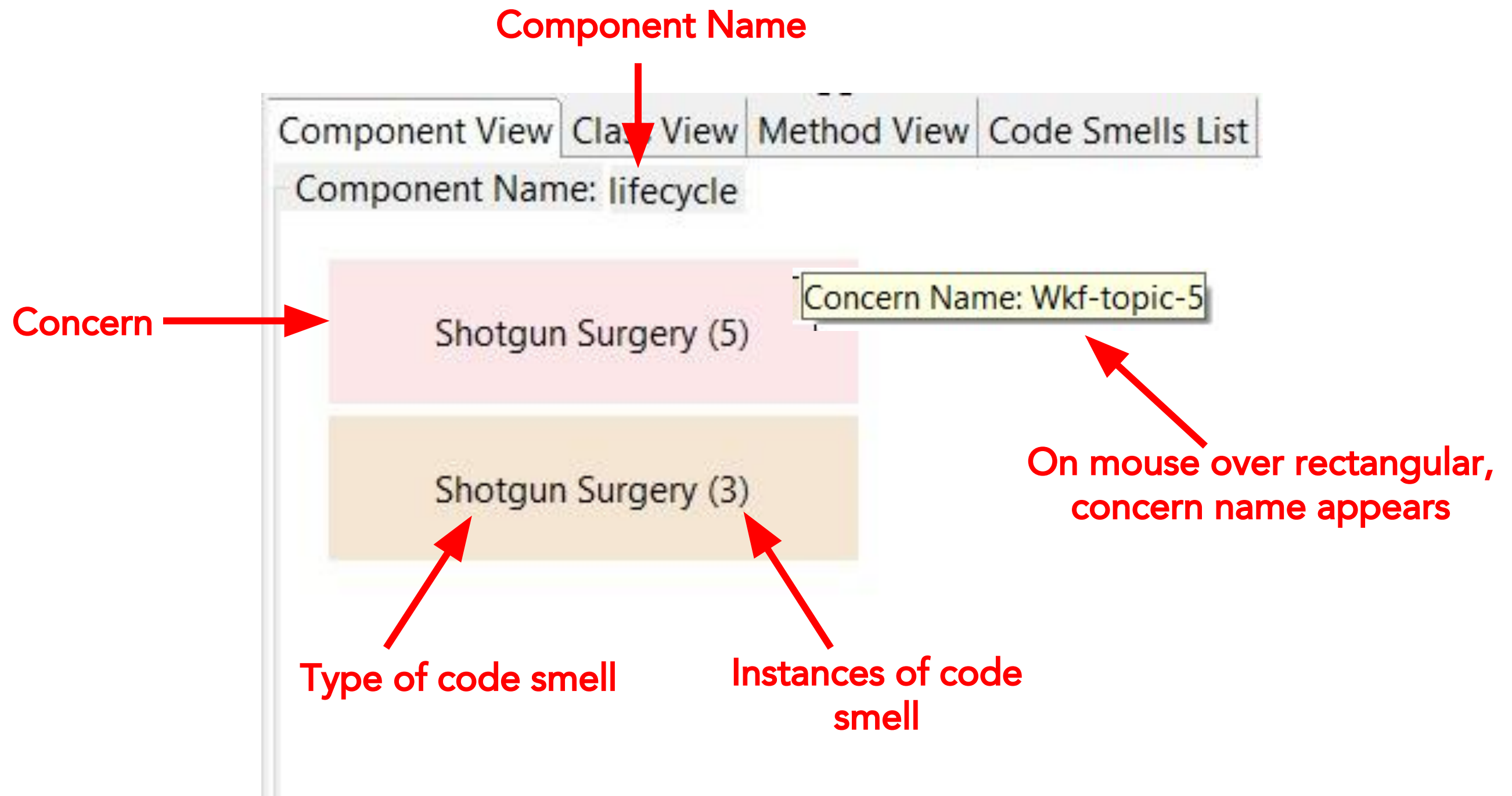
Agglomeration type: Hierarchical Agglomerations

Visualizations: Component View, Class View, Method View

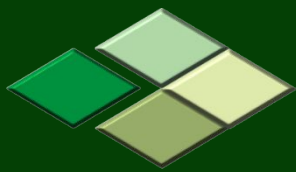
Smell list: Code Smells List



Component view

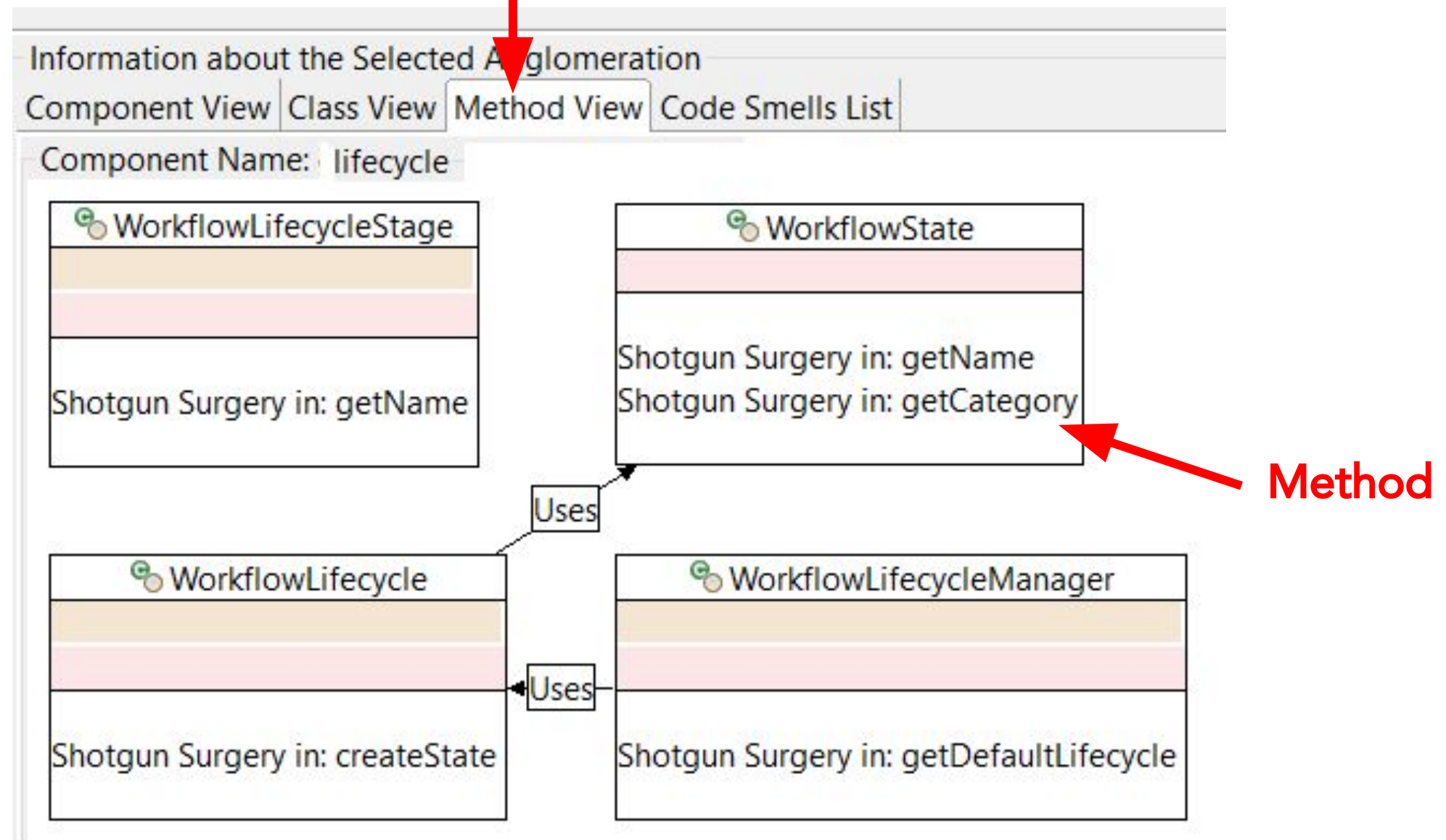


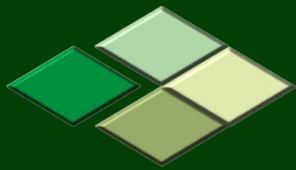




Method view

Method View Visualization





Code smell list

Information about the Selected Agglomeration

Component View | Class View | Method View | Code Smells List

- ⚠ Shotgun Surgery -> WorkflowLifecycleManager.getDefaultLifecycle
- ⚠ Shotgun Surgery -> WorkflowState.getName
- ⚠ Shotgun Surgery -> WorkflowState.getCategory
- ⚠ Shotgun Surgery -> WorkflowLifecycleStage.getName
- ⚠ Shotgun Surgery -> WorkflowLifecycle.createState

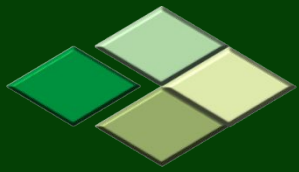
Code Smell

Class

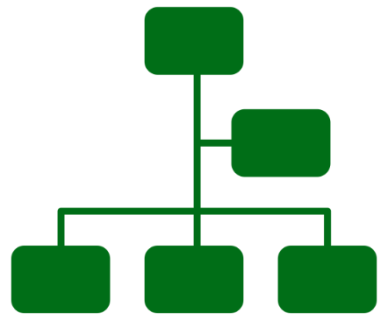
Affected method

Clic to Navigate to
source code

About the Experiment with VISADEP

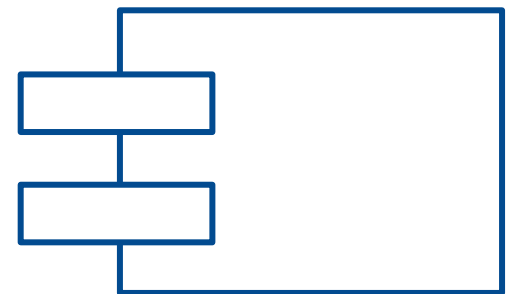


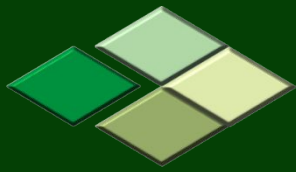
Main objective



Reason about pre-selected
code smell agglomerations

Identify (or not) design problems
with the agglomerations





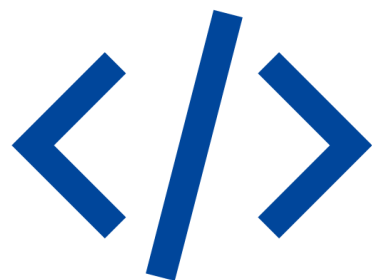
In case you identify a design problem...



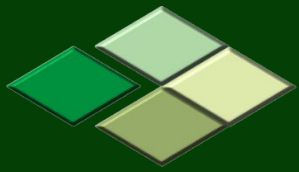
Briefly **describe it**



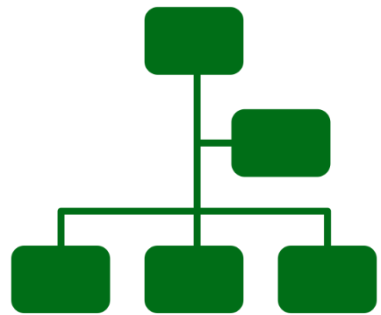
List the **visualization elements** that helped identifying it



List the **code elements** involved in the design problem

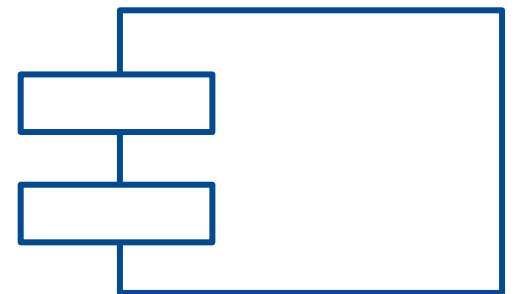


Final considerations



You will have **90 minutes** to finish the experiment

Questions? Please ask the experiment instructor



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