



# GazeTheWeb – Browse Structure

Uni Koblenz Team  
MAMEM – 4<sup>rd</sup> Physical Meeting  
01-05 June, 2016, Athens

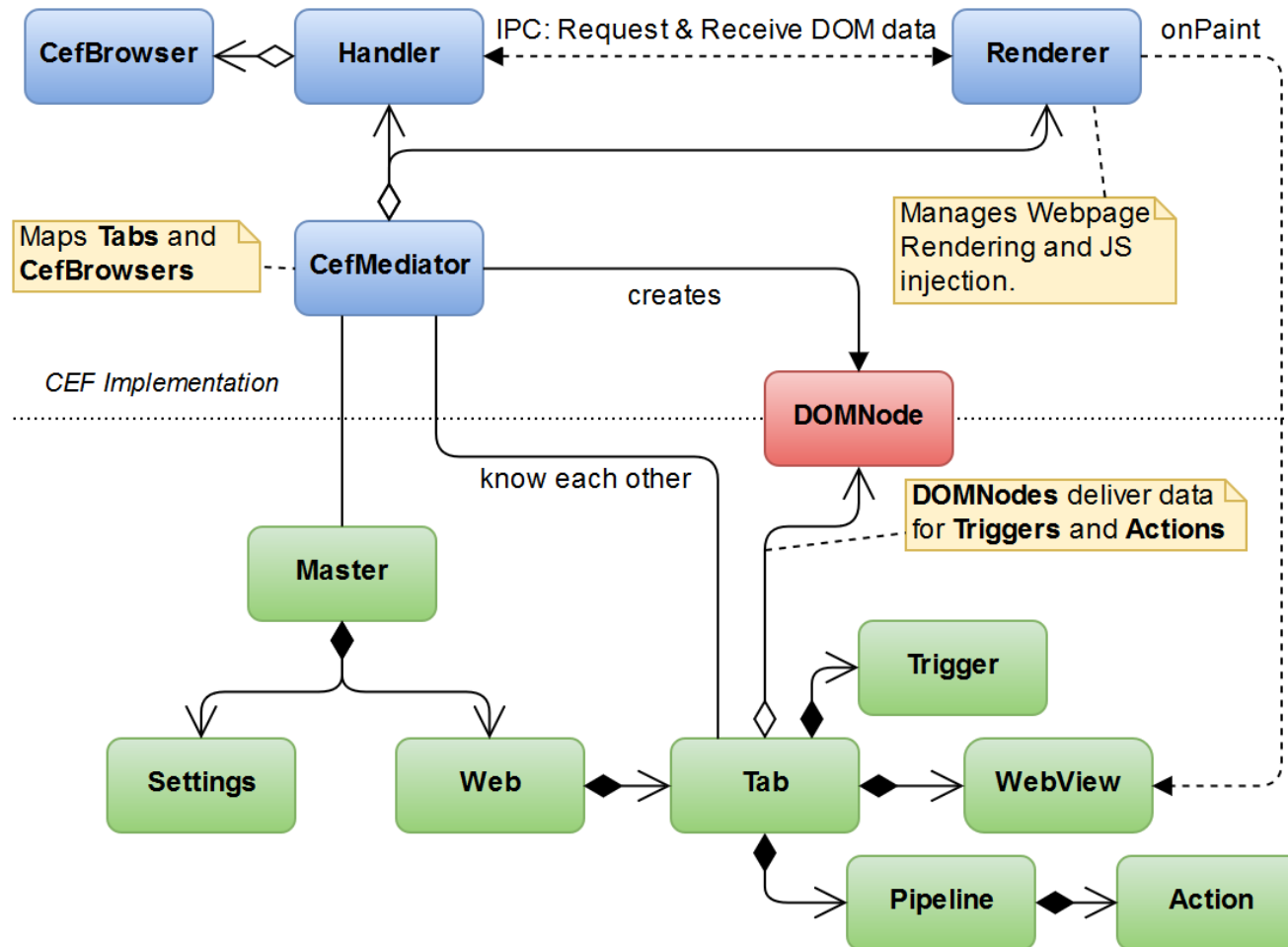


# Outline

- GazeTheWeb - Browse
  - Structure
    - Visual Browser
    - Pipeline Example
    - Chromium Embedded Framework
  - Layouts



# Structure

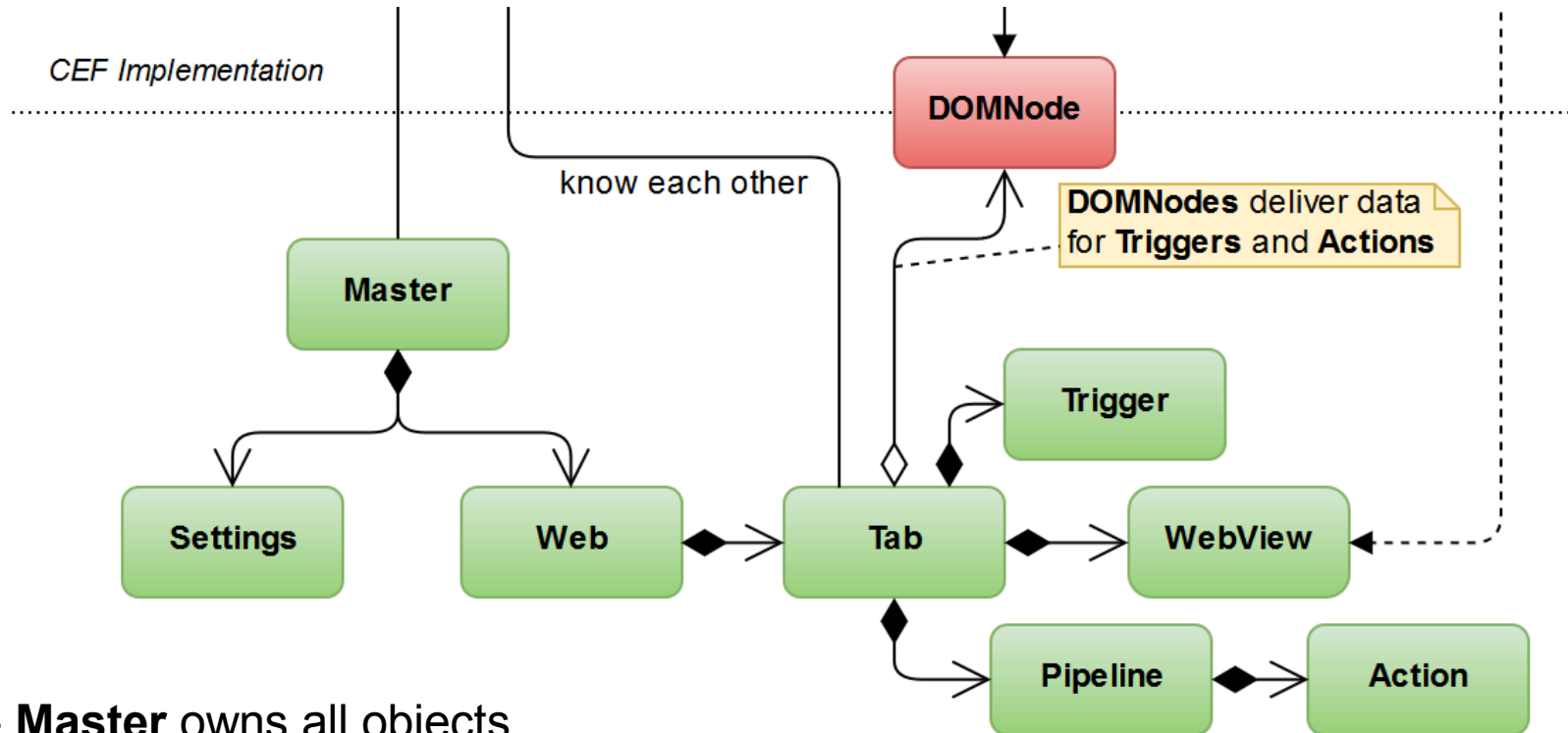


Implementation  
of CEF Classes

Connected through  
CefMediator

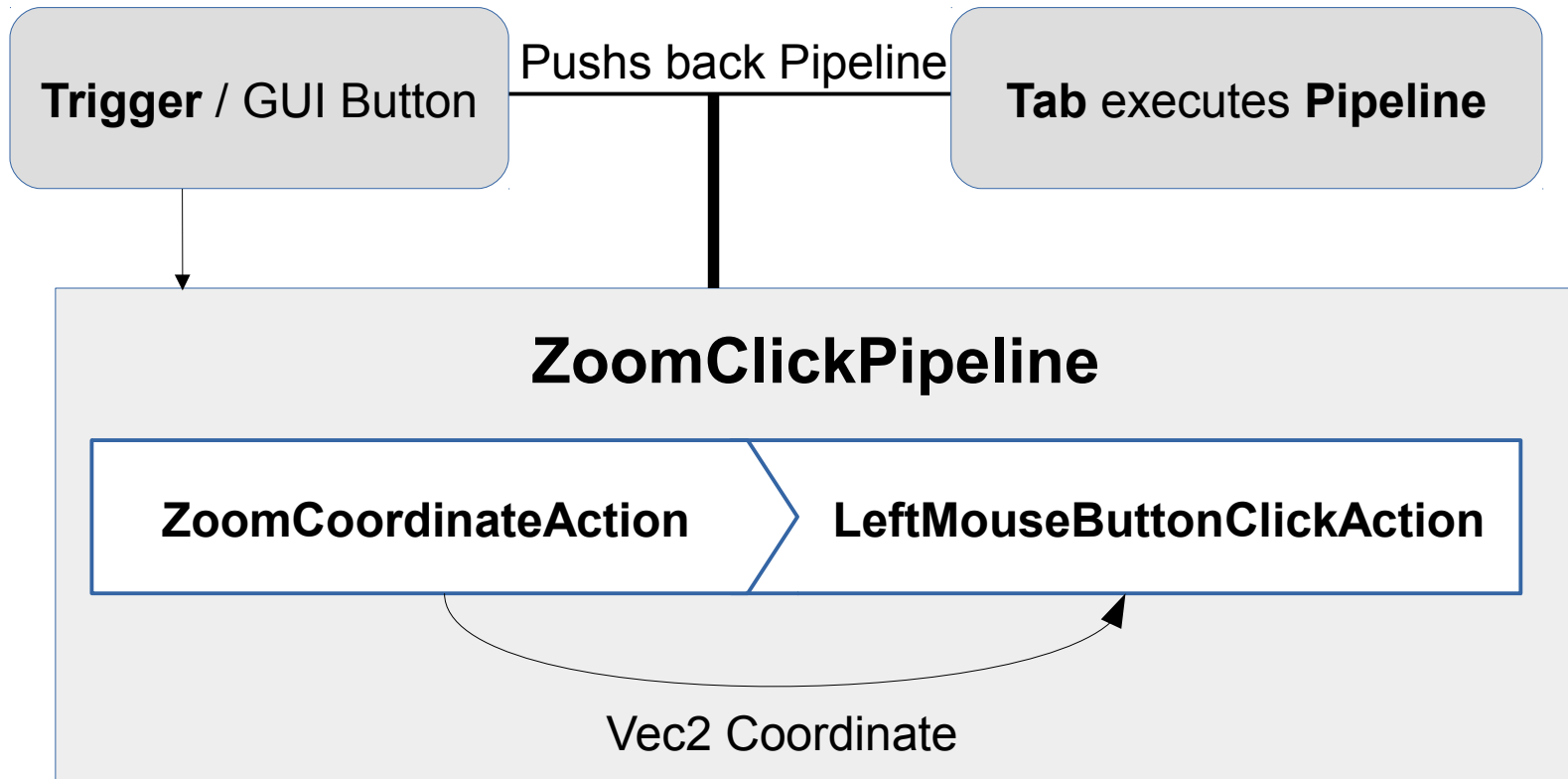
Visual Browser

# Structure – Visual Browser



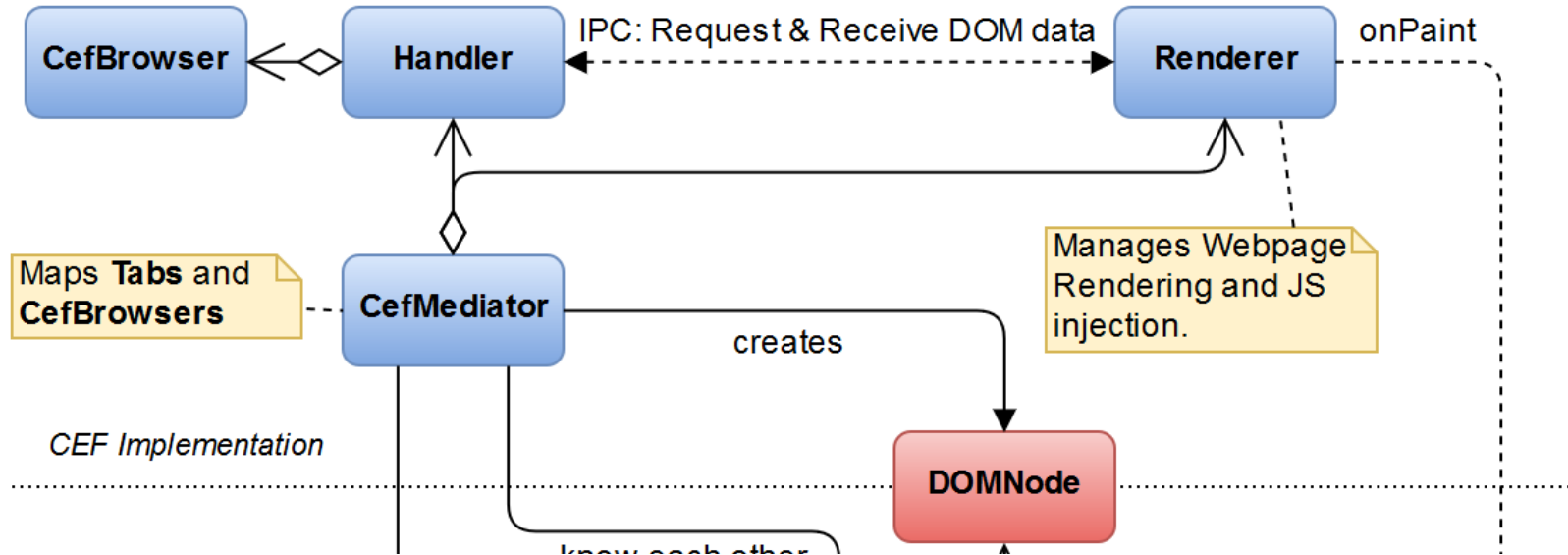
- **Master** owns all objects
  - **Web** organizes **Tabs**
    - **Tab** has one **WebView** filled by CEF **Renderer** at *onPaint*
    - **DOMNode** are filled by **CefMediator**
    - **Triggers** generated from information from **DOMNodes**
    - **Triggers** push back **Pipelines**

# Structure – Pipeline Example



- Only one **Pipeline** may be active in **Tab**
- **Pipeline** consists of connected **Actions**
- Only one **Action** may be active in **Pipeline**

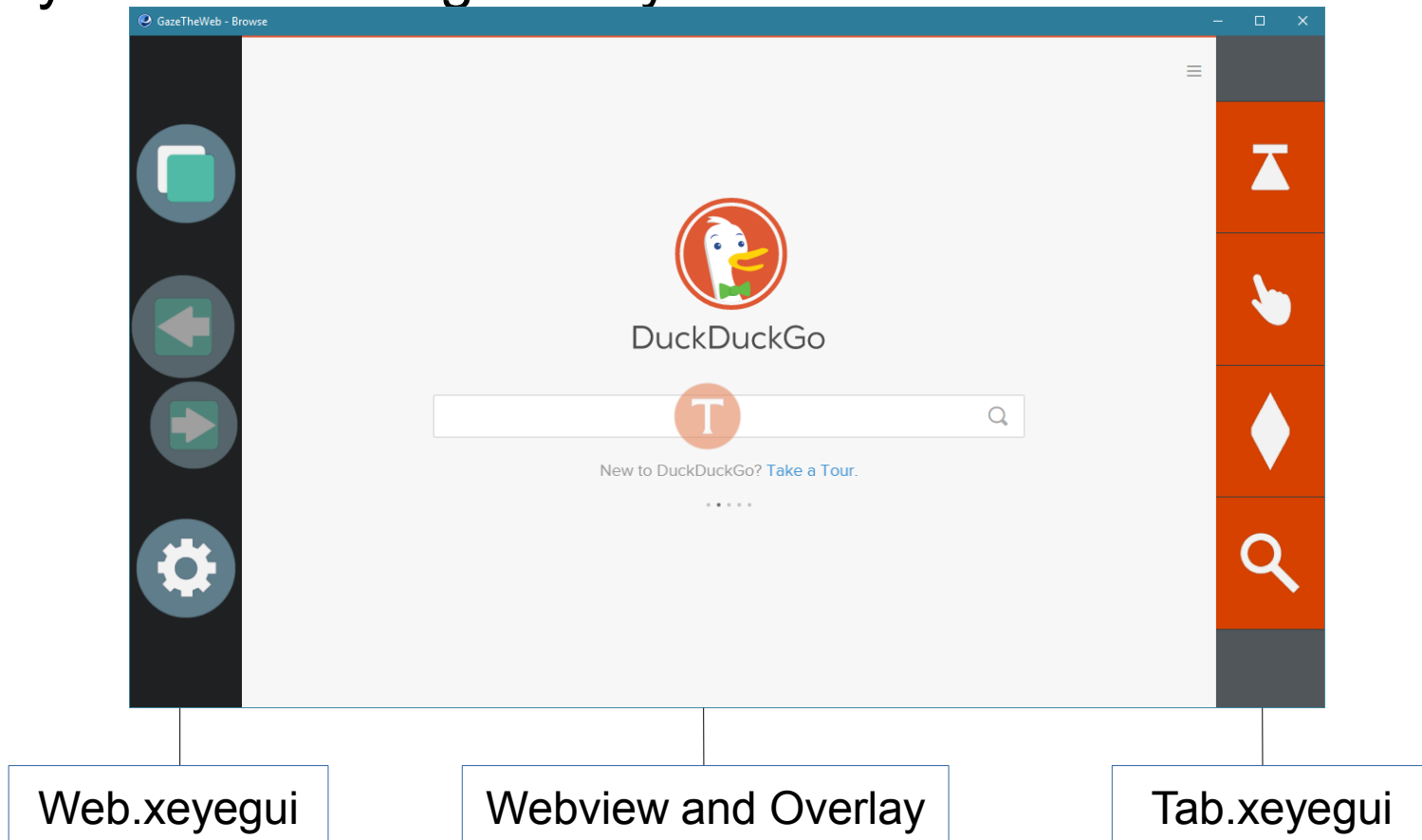
# Structure – Chromium Embedded Framework



- **CefMediator** is interface between visual browser and Chromium Embedded Framework
  - Maps our **Tabs** with their **CefBrowsers**
  - Collects **DOMNodes** per **CefBrowser** and give them to corresponding **Tab**
- **Handler** manages **CefBrowser** instances, receives callbacks
  - Communicates with **Renderer** over IPC messages (inter process communication)
- **Renderer** runs in own process (so there are two active at the moment)
  - Draws all **CefBrowsers** and calls *onPaint* which fill corresponding **WebView**
  - Executes JavaScript in V8 engine (may be requested by **Handler** over IPC)

# Layouts

Layouts are saved in Client/content/layouts as .xeyegui file in XML syntax describing the layout.



# Thank You!