Framework for Entertainment Data Collection and Visualization

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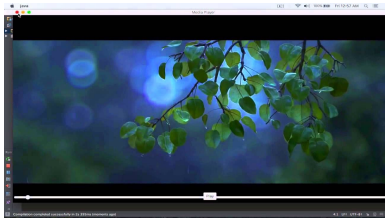
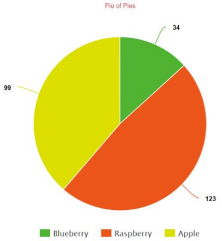
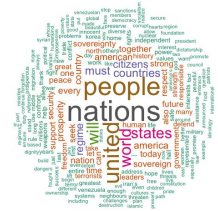
Framework Domain







Any media that has a title, videos and reviews/comments such as movies, tv shows, video games and music.

- Example data plugins:

  Movie information scraped from **imdb.com**.

  Video games with **twitch** gameplay and **ign** reviews.

  Music reviews from **Last.FM** with a music video.

- Example visualization plugins:

  Web page that introduces the media with a video and other information.

  Wordcloud of most frequent words in the review/comment.

  Pie chart with **sentiment analysis**.

Generality and Specificity of Framework

Abstractions:

- The data and visualization plugins are not coupled; the framework and framework GUI controls the flow of the project
- The data is represented as an abstract class (MediaInfo)

Reusability:

- Framework can be reused for a variety of data and visualization plugins
- Sentiment analysis can be conducted for all media

Flexibility of plugins:

- Data plugins can take in data from any source, given that the data represents some form of entertainment with a title, reviews/comments, and an associated video
    - For instance, a song typically has a title and a music video with comments
- Visualization plugins can visualize any data processed by the data plugin

Project Structure

Main class

Core

- MediaFramework
- MediaInterface

GUI

- FrameworkGUI

Plugins

- Data Plugins (extend MediaPluginInterface):
  - MovieIMDBPlugin
  - MovieRottenTomatoPlugin
  - VideoGameIGNPlugin

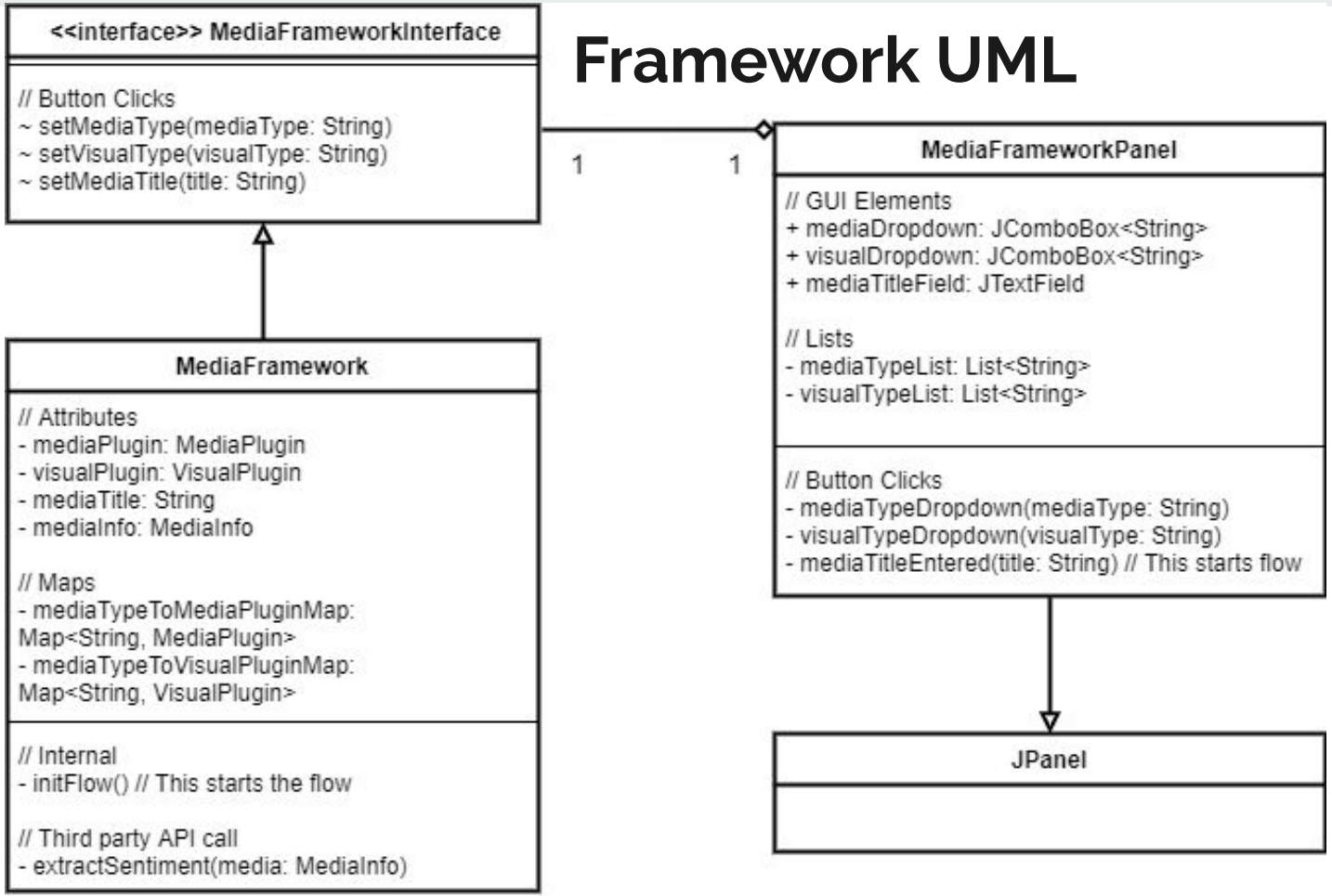
Plugins

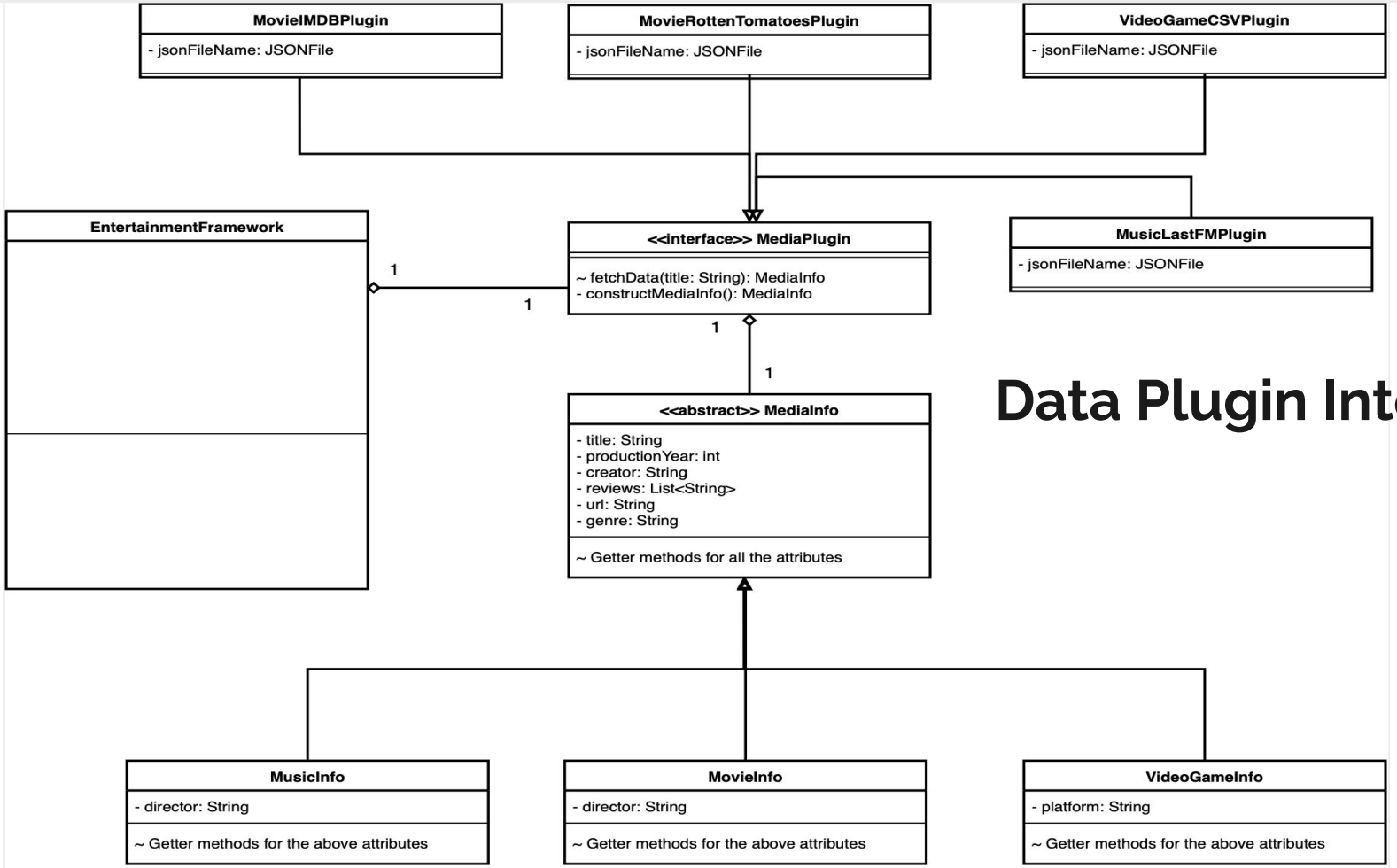
- Visual Plugins (extend VisualPluginInterface):
  - SentimentPlugin
  - WebpagePlugin
  - WordCloudPlugin

Test

- FrameworkTest
- PluginTest

Framework UML





Data Plugin Interface

Visualization Plugin