Rise & Shine - Initial project documentation

Target release	29/07/2022
Epic	✅ **RS-21** - Initial project documentation **IN PROGRESS**
Document status	**DRAFT**
Document owner	@ Kat Miksche
Designer	@ Kat Miksche

🎯 Objective

Final project in CFG Nanodegree - SW developer.

Stock market app allowing you track and trade stocks. Manage multiple portfolios and see your gains in friendly graphic interface or check their status via web. Get automated evaluation of stock from machine learning model to help your purchase decisions.
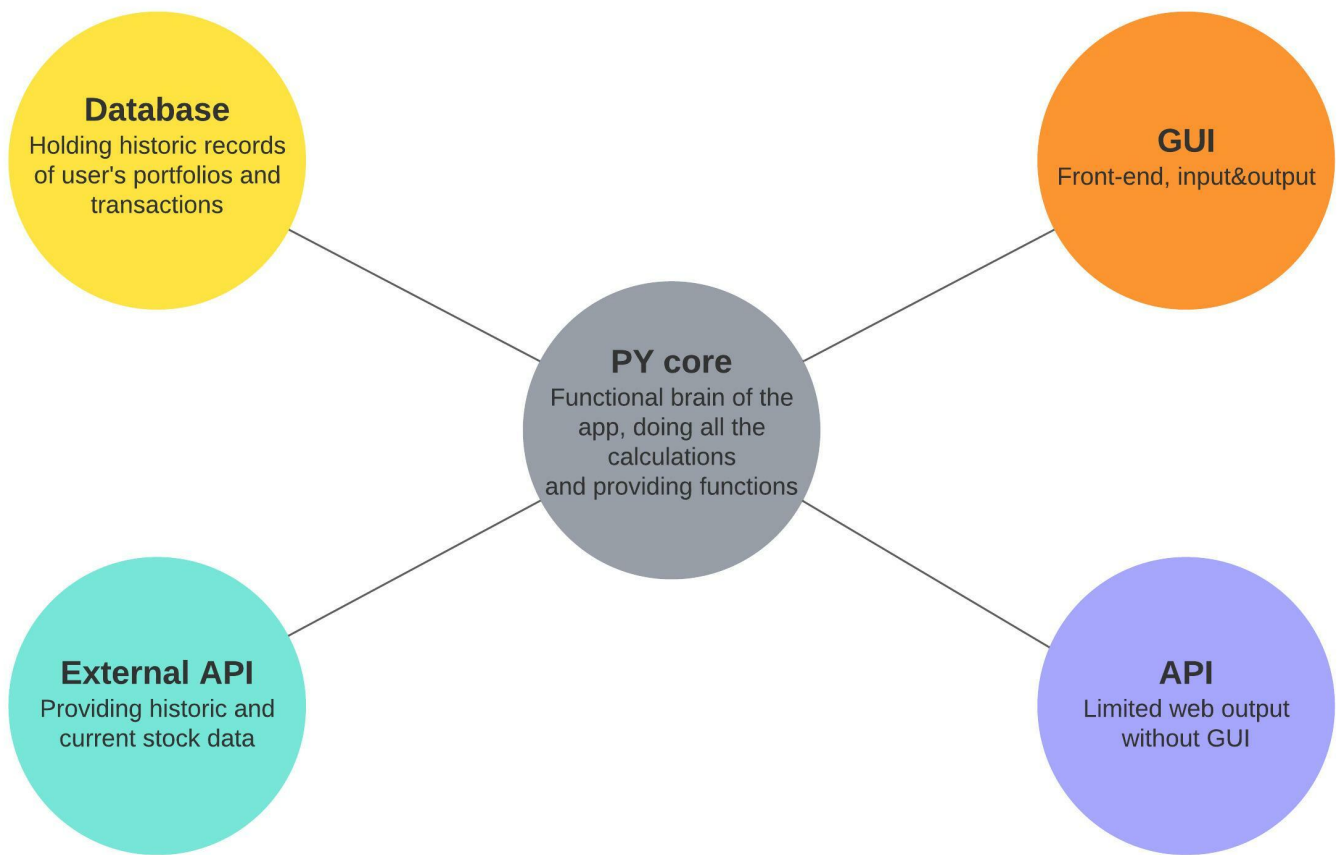
📊 Success metrics

List of project goals:

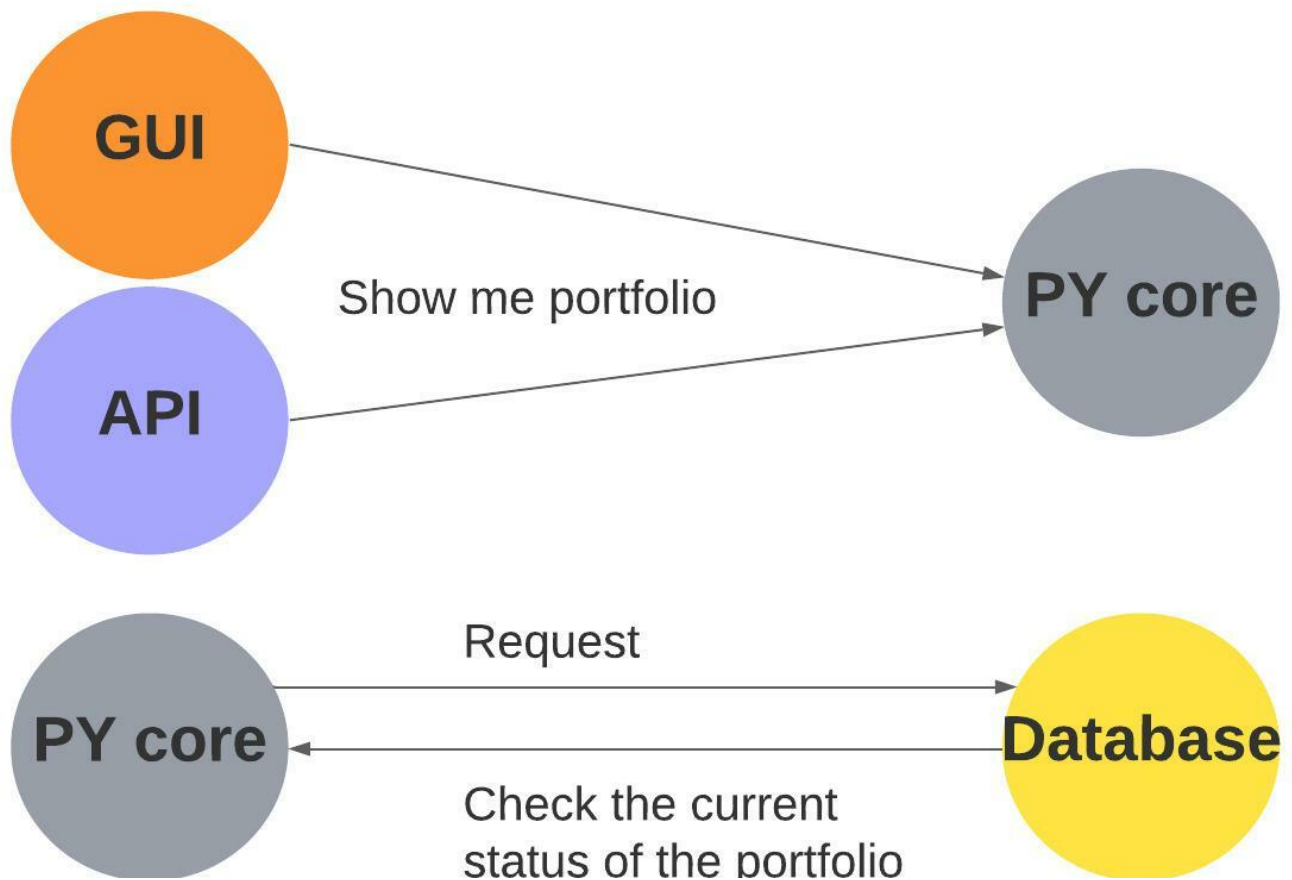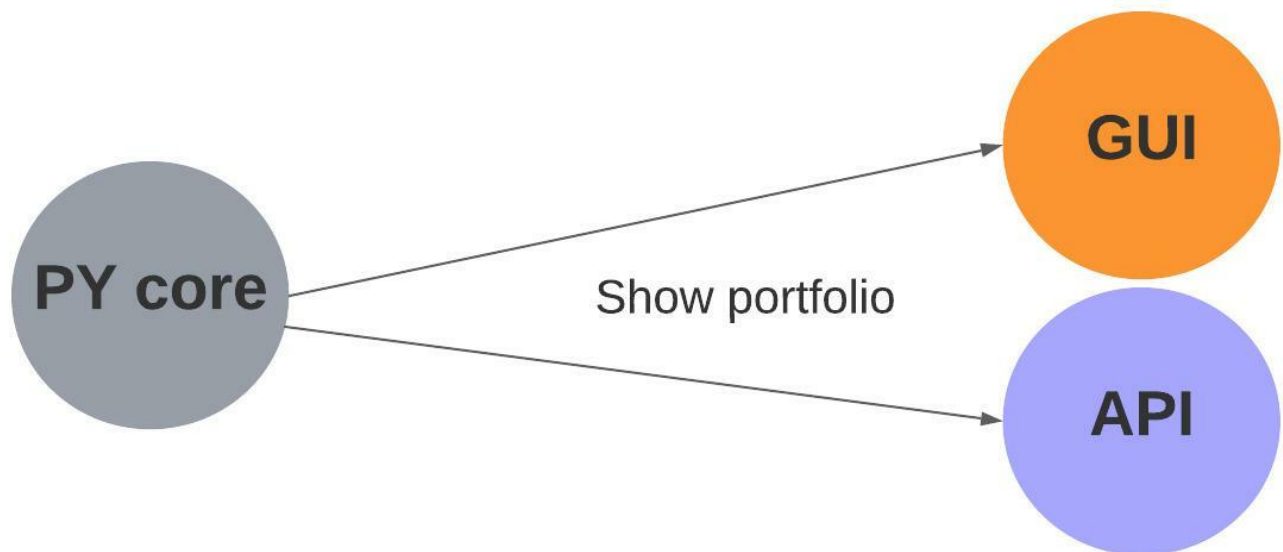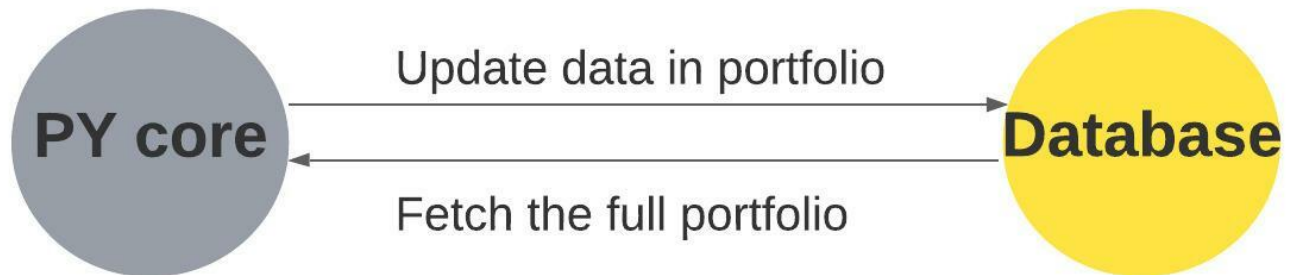| Goal	Details
Fulfill final project requirements	Use all required technologies and methods
Have working app	PY Core, DB and external API working
Simplify the user experience	GUI
Allow web access	API
Provide automated evaluation of stock	Machine learning

🤔 Specifications and design

Architecture:

Database
Holding historic records of user's portfolios and transactions

GUI
Front-end, input&output

PY core
Functional brain of the app, doing all the calculations and providing functions

External API
Providing historic and current stock data

API
Limited web output without GUI

Example of function:

GUI

API

Show me portfolio

PY core

PY core

Request

Database

Check the current status of the portfolio

PY core →(Request)→ External API
External API →(Fetch new data)→ PY core

PY core →(Update data in portfolio)→ Database
Database →(Fetch the full portfolio)→ PY core

PY core →→ GUI
PY core →(Show portfolio)→ API

📋 Requirements

Database:

Child issues

Order by ⌄ ⋯ +

0% Done

🔲	RS-17	Basic architecture	1	KM	TO DO ⌄
🔲	RS-18	Indexing and Constrains	1	KM	TO DO ⌄
🔲	RS-19	Views	1	KM	TO DO ⌄

PY core:

Child issues

Order by ⌄ ⋯ +

0% Done

🔲	RS-29	init connect to database	1	KM	TO DO ⌄
🔲	RS-28	fc update	3	KM	TO DO ⌄
🔲	RS-23	load/withdraw money ...	1	KM	TO DO ⌄
🔲	RS-27	more portfolios / start ...	1	KM	TO DO ⌄
🔲	RS-22	fc close portfolio	2	KM	TO DO ⌄
🔲	RS-24	buy stock	2	KM	TO DO ⌄
🔲	RS-26	portfolio value overview	3	KM	TO DO ⌄
🔲	RS-25	fc check any stock	3	KM	TO DO ⌄

API:

API

To Do ⌄

Description

API to check current portfolios, their tickers and their values, optional to check any ticker

Pinned fields	^
Story point estimate ③	

Extensions:

Child issues	Order by ⌄ ⋯ +
	0% Done

	RS-31	evaluate stock by model	5	KM	TO DO ⌄
	RS-30	bet on downcrease	0	KM	TO DO ⌄

GUI:

GUI

To Do ⌄

Description

graphical interface for the whole program

Pinned fields	^
Story point estimate ⑤	

🎨 User interaction and design

Will be done in Tkinter.

🌟 Implementation and execution

Roadmap:
https://rise-shine.atlassian.net/jira/software/projects/RS/boards/1/roadmap

Cumulative flow diagram (29/07/2022):

Sprints planned:

Sprint1 burndown chart (29/07/2022):
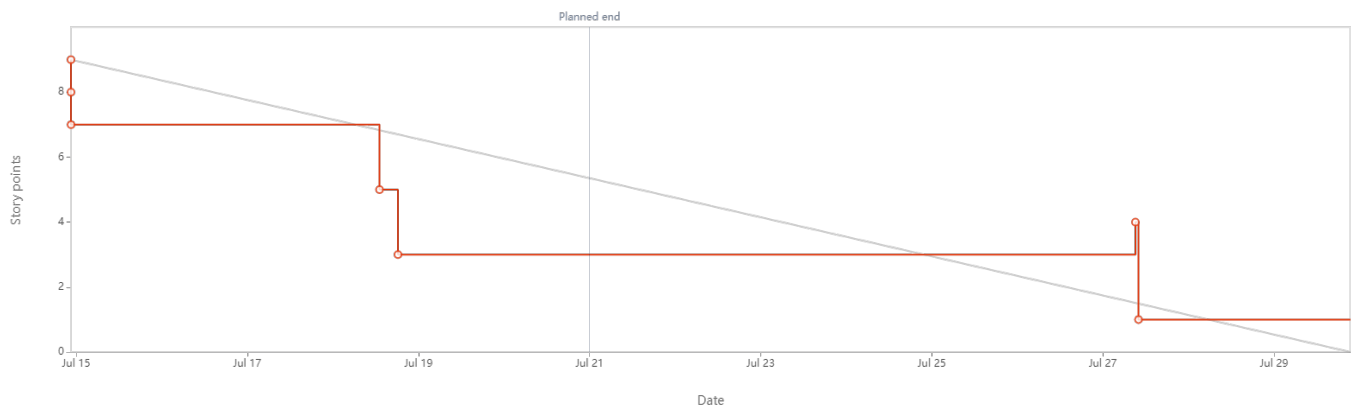
Open Questions

Question	Answer	Date Answered

Out of Scope

- Bet on downcrease