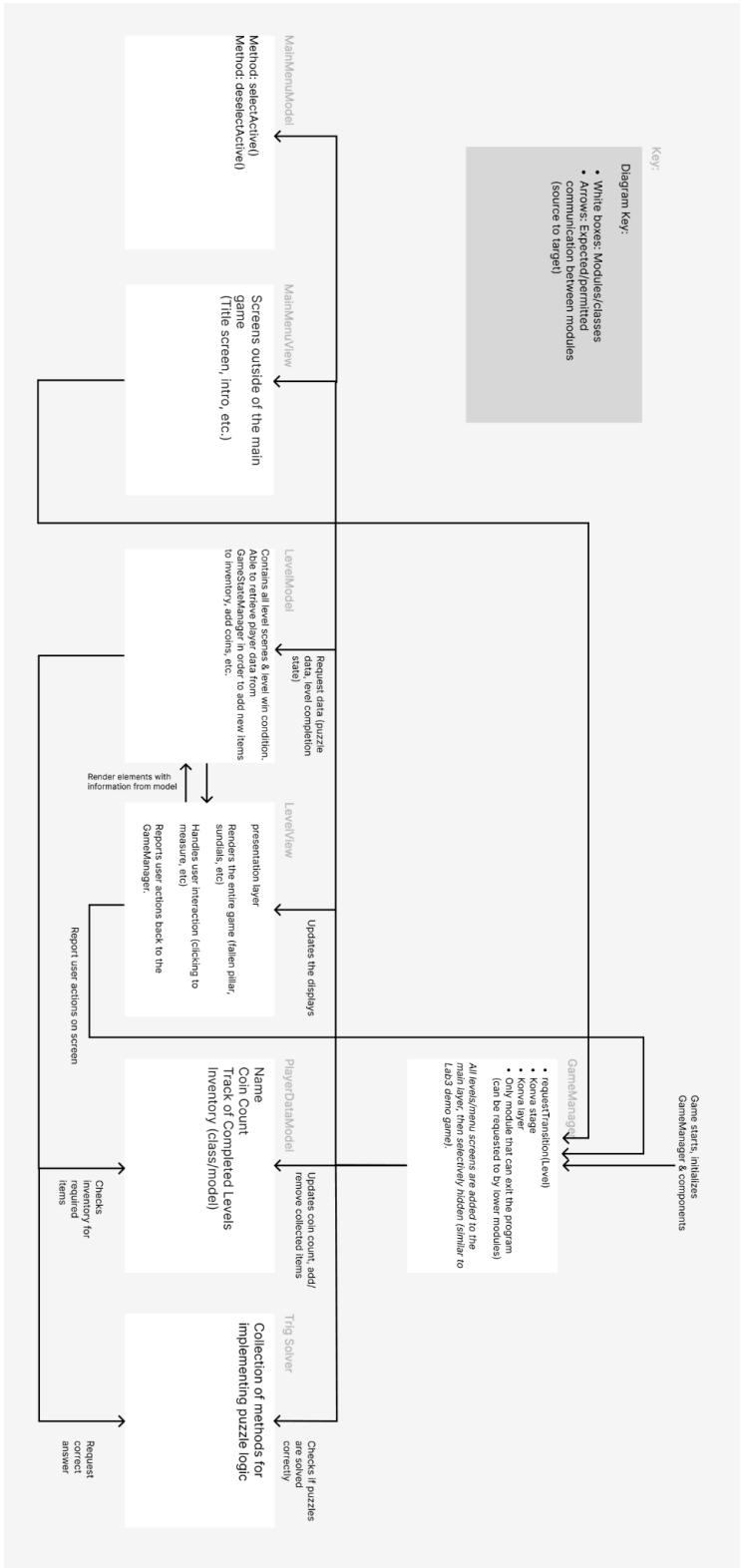
https://www.figma.com/design/rOMvsSXjgTiRCjU7ZiGYg0/Architecture-Design--Static-View-?node-id=0-1&t=ryuIJV3Cn3TgL1Is-1



Planning for the Static view

1. Main
    a. Game Manager
        i. Implements requestTransition method to switch between levels
        ii. LevelModel
            1. LevelView (--> red arrow for render LevelModel)
                a. TrigSolver
                    i. ConverterUtility
        iii. PlayerDataModel
            1. Name
            2. Inventory class/model (depends on implementation)
            3. Coin count
            4. Completed levels (?)
        iv. TrigSolver
            1. Collection of methods for implementing puzzle logic
            2. ConverterUtil: Converts between rad & deg

Game Manager – Manages loading levels, transitions,holds current PlayerData model, and user input. Receives input from LevelView and updates the state in the LevelModel (LevelView and LevelModel point to it)

LevelModel – Holds the specific state data for the current level

TrigonemtrySolver – Primary logic engine. Contains methods to perform the core mathematical calculations required to solve puzzles

PlayerDataModel – Manges the player's name, backpack (including Crystals, Paper items, and Coins), level their at

ConverterUtility – Handles the conversion logic for degrees and radians. Used by TrigonemtrySolver and the mini-game logic

LevelView – The presentation layer. Renders the entire game (fallen pillar, sundials, etc) and handles user interaction (clicking to measure, etc). Reports user actions back to the GameManager.