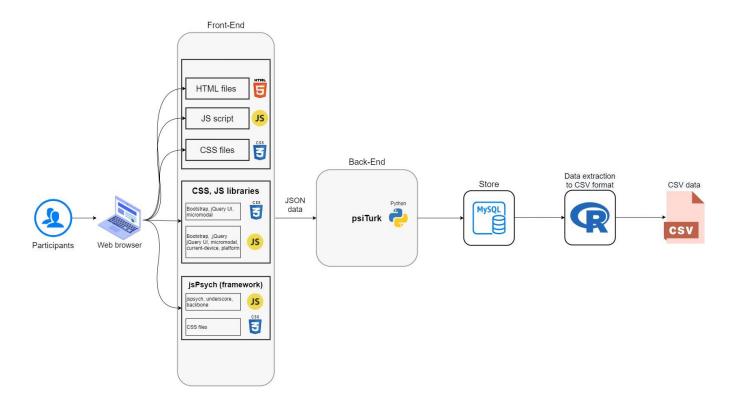
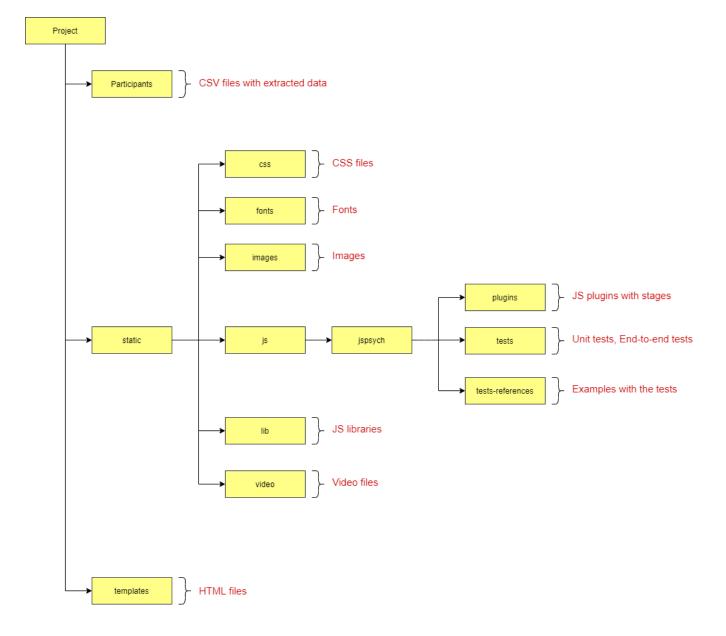
Software architecture

The following diagram illustrates the software architecture of Pittask app:



Project folder structure

The following diagram illustrates the directory structure:



Folders structure explanation and role:

- Participants Contains CSV files with extracted data in CSV format. Used as a default directory for data extraction from MySQL database with R-studio help.
- **static** main directory contains subdirectories with the required files JavaScript, CSS, images, videos, fonts.
- **templates** contains HTML files. HTML files are required for application loading, finishing the experiment, etc. The content of HTML is entirely controlled by the JS scripts.
- css contains CSS files. Used for styling web elements of the application.
- fonts contains font files. Used for styling text elements of the application.
- images contains images. Used in some stages as an outcome, stimuli.
- **js** contains JavaScript scripts, tests scripts. Uses for logical separation scripts from rest files.
- video contains video files. Required for "Deval Video" stage.
- **lib** contains JavaScript files with the required JavaScript libraries. Used for logical file separation.

- **jspsych** contains JavaScript files with plugins (stages), JavaScript tests, parameters.js, jspsych.js files. The script parameters.js allow applying various pre-set parameters which are influence the stage duration, number of outcomes, etc.
- plugins contains JavaScript plugin files for all application stages.
- tests contains unit-test and end-to-end test files.
- **test-references** contains unit-testing JavaScript files with examples provided by jsPsych library.
- jspsych-survey-questionnaire contains plugins for WBF(web based forms).
- **jspsych-vvr** contains JavaScript files for VVR stage.

Description

The Pittask application is built based on <u>JsPsych</u> and <u>Psiturk</u>. To collect information the application uses MySQL database.

Client-side code, languages used include:

- CSS
- JavaScript
- HTML

The Psiturk server-side used:

Python

Database:

MySQL

The <u>Psiturk</u> API allows launching the application on the <u>Amazon Mechanical Turk</u> server for collecting participant data.

Data parsing and extraction to CSV format written with R language.