

VG100

Introduction to Engineering

Lab 1

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Goals of the lab

- Project structure
- View module
- Elm playground

Preparation:

- Complete the installation of the Tetris game and explore the source code.
- Ensure you can jump to the definitions and references of the functions and types from inside your text editor.

HTML related tasks:

- Open the View.elm file and search for the `div` tag.
- Check online how to use `div` inside HTML code.
- Compare how `div` is used in HTML and how it is used in Elm.
- Alter the color of the “Pause button” in the Tetris game.
- Change the game introduction text.
- Modify the appearance of the Left, Right, Down, and Rotate buttons. For this question you are only bounded by your imagination...

In VG101 lectures we built a small home which automatically zooms in and zoom out (Figure 1). Using Elm playground package, we want to reproduce a similar effect.

Tasks:

- Read through Elm Playground documentation.
- Refer to slide 2.12 and <https://elm-lang.org/examples/animation> to understand how to create shapes and animate them.
- Draw the basic home.
- Animate the home.
- Allow the user to rotate the home by pressing keys. Refer to slide 2.19 and <https://elm-lang.org/examples/keyboard> to understand how to handle keyboard events.

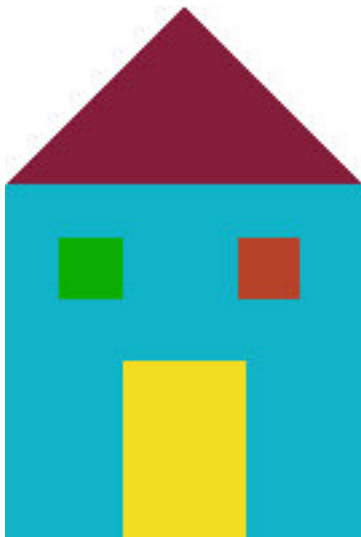


Figure 1: Vg101 home