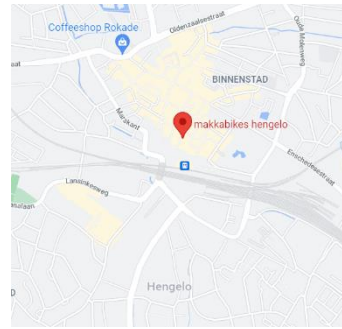


Final Project Programming – Bike Shop Makka Bikes – by Sem Bakker (2771020)

Synopsis

The shop window I chose for this final project is that of bike shop Makka Bikes, located in Hengelo.

The bike shop can be found in the city centre of Hengelo, near the train station. (see image 2)



Returning elements:

The main feature that can be seen are the many bicycles in the window.

The returning element are the bicycles. And the colours used in the shop window will also make a return in my program.

Usage and interactions

- My program lets the user customize their own bicycle.
- The different elements that can be customized are: the wheels, frame and handlebars.
- The user can change parts by going to the menu corresponding to the part they want to change.
- There are three complete sets of bicycle parts to choose from: race, regular and mountain bike.
- Additionally there are two bonus parts: car tires and a car steering wheel.

Architecture

Classes:

- Main (bikeshop4) – sets up and combines everything
- Bicycle – responsible for displaying the bicycle
- Customizer – responsible for changing the bicycle
- UserInterface – displays UI and also does event handling for the UI

Most important methods:

- Important methods for the ui: void mouseClicked(); void buttonCheck(); and Boolean overButton(); These activate when the mouse is clicked and check if a button was pressed.
- Important methods for changing bicycle parts: void changePart(String part, String set) and void changeOffset(String set); These change part to a part of another set/style and adjust the offsets respectively
- The other methods are for drawing/displaying: Draw(); , display(); , displayRegularButton(); , displayConfirmButton();

Diagram:

