Features Description

The aim of this document is to provide a written description of features of the YCM Projekts visualization. This includes all features presented in the mockup, additional variants of them and features that cannot be adequately simulated in the mockup.
This document also includes information on design decisions that do not introduce any functionality and their possible variants.
At a later time information about which variants where selected for the prototype will be introduced into this document.

Template:

Feature 1 Name	Description of feature 1
	Variant 1: alternate way the feature could look/work. Does not have to but can be exclusive to standard variant
Feature 2 Name	Description of feature 2

1. Features Presented in the Mockup

Information Box	By pressing the left mouse button while the cursor is over a note of the graph will open a box on the right side of the canvas. The box will display information on either the reaction or species corresponding to the selected note. The selected note is highlighted as long as the box is open. Box can be closed by clicking the selected note again, clicking a closing symbol in the upper right corner of the box or selecting a new note to display information for.
	Variant 1: Information could be displayed in a small pop-up window right next to the selected note.
Zoom Bar	On the right site of the canvas is a tool to open or close all compartments up to/from a certain depth. The tool consists of a plus, a minus and a bar. The bar shows how many levels of compartments are open. Pressing left mouse button while over the plus will open the next level of compartments. Pressing left mouse button while over the minus will close the lowest level of compartments.
	Variant 1: As levels of compartments are very limited, the zoom bar could be replaced by a simple selection element or omitted entirely.
Open/close Compartments	Compartments can be opened/closed by left clicking a plus/minus symbol in the upper right corner of the compartment.
	Variant 1: Compartments can be opened or closed by (double-) clicking their name.

2. Additional Features

Pan	By pressing and holding the left mouse button, while the cursor does not hover over otherwise interactable elements, the canvas can be moved with the cursor.
	Variant 1: Move canvas by pressing arrow keys
Zoom	The visualization can be enlarged or reduced in size via the mouse wheel.
	Variant 1: Press third/middle mouse button to change size by moving the cursor up

	or down

3. Design Decisions

Notes and Edges	There are 3 types of notes: 1. a species represented as a circle 2. a reaction represented as a rectangle 3. a closed compartment represented as a large rectangle with cut off corners there can be no edges between any two reactions or any two species
Modules	Each module gets assigned a color. Each compartment gets a colored tag on the upper left site for each module that introduced a reactions to that compartment. All reactions and any connected edge are colored with the color of the module that introduced the reaction
	Variant 1: the color assigned to a module can be changed by clicking any of its tags.
	Variant 2: instead of using color a tag of the appropriate module could be applied to each reaction note.
Visibility Reduction	Certain notes (eg ATP) and their edges are displayed lighter to make them less visible. This is done because those species are so common that they are usually not drawn.