

# Own Games

My self made games.

- [Tower Defense](#)

# Tower Defense

## Overview

This is a simple tower defense game made by students at Gymnasium Landau a.d. Isar in the year 2016. It was a project work done as training exercise in groups of 5.

## Project documentation

- 13.06.2016
  - Game opens a window and draws the playing field
- 16.06.2016
  - Game recognizes mouse and has a store
- 17.06.2016
  - Tests with various different textures
- 20.06.2016
  - Health and money display
  - New textures
  - Mobs and pathfinding implemented
- 21.06.2016
  - Meeting
  - Tests with various mobs
- 25.06.2016
  - First implementation of turrets
  - Turrets can fire and damage mobs
  - Added kill counter
- 26.06.2016
  - Added pause and spawn wave buttons
  - Tests with the mob spawner
  - Implemented various different towers
- 30.06.2016
  - Meeting
  - Bug-Fixes:
    - Multiple mobs stacked inside each other
    - Game-crashes (NPE)
    - Kills counting double (for each shooting turret)
  - More textures added

Original file: [DIA2.docx](#)

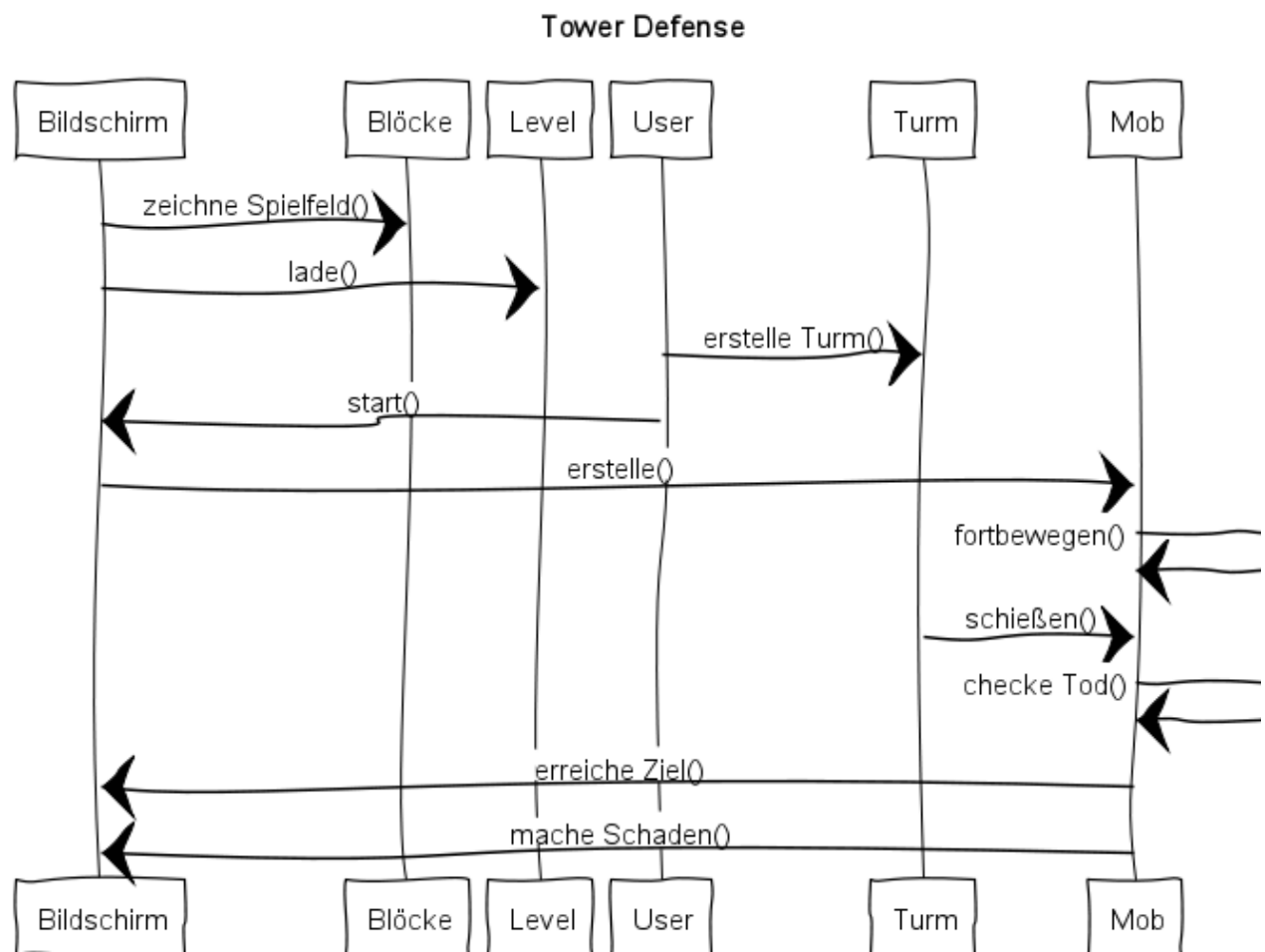
## Decisions

- Level storage
  - External file, easier to be edited
  - Scanner reads integers from file
- Texture storage in grids and division into 2 layers
  - One layer as background
  - One layer for turrets, mobs, trashcan, etc.
  - Enables easy access to the textures
- Storing integer values for i.e. textures in a extra class
  - Easy access
  - Can be managed and edited centrally
- Wave-spawn-button
  - Fixes problems with the mob spawner
  - More control by the player
- Graphics decision: No animations
  - Would make the project too complex

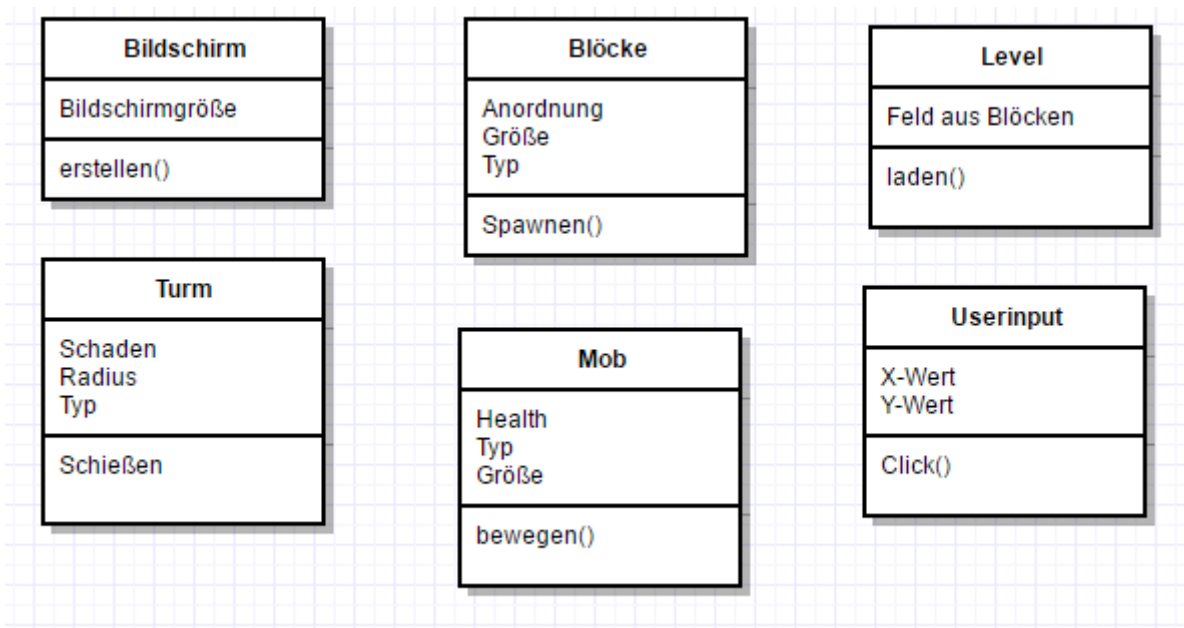
Original file: [DIA3.docx](#)

## Diagrams

- Sequence diagram



- Class diagram (first mockup)

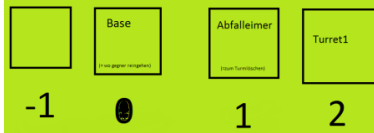


- Class diagram (final)

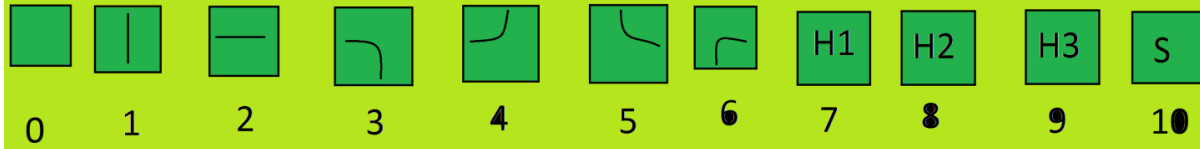


## Tileset assignment

Air



Ground



Releases

Alle releases are documented at [git.greinet.com](https://git.greinet.com). The final release was release 4.0.0.

## All documents

Documents.zip