# BLACK WATER

# TECHNICAL DESIGN DOCUMENT

**SCRUM WS 2017/18** 



# TECHNICAL DESIGN DOCUMENT

# SECTION 1 — LIST OF FEATURES

- Top View and Side View
- Game World, including
  - 2D Objects
  - Characters
  - Buildings
- Background Story
- Player Movement
  - Jumping
  - Wall-Jumping
  - Walk
  - Duck
  - (Double Jump)
- Audio and Sound Effects
- Interactive Objects
- Windows platform deployed

#### SECTION Z — CHOICE OF GAME ENGINE

Unity was chosen as the used Game Engine. Unity is a cross-platform game Engine developed by *Unity Technologies,* which supports both 2D and 3D graphics and scripting through C#. Some features of Unity are:

- Animation
- Al
- Audio System
- Game Environment Editing
- Mono Develop (build in scripting IDE)
- Physics support
- Rendering/texture Compressing

Unity was chosen, due to its high compatibility with multiple platforms and flexibility. All Team Members have gathered Experience with the Engine through extended practice in previous Semesters. Optional Unity Plug-Ins and the Asset Store will prove themselves useful.

## SECTION 3 — SOFTWARE DESIGN

#### **Technologies Used**

The diagram below indicates what technology is going to be used for different aspects of the game:



## SECTION 4 – first Tool

#### 4.1 Maya:

Version: Autodesk Maya 2017 Student License

Will be used for: Animate and model objects in cooperation with Animator

#### 4.2 Photoshop:

Version: Adobe Photoshop CC 2017

Will be used for: Textures e.g. background, walls and general appearance of the environment

#### 4.3 Audacity:

Version: Audacity 2.1.3

Will be used for: Editing, recording, slicing and mixing audio

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#### 4.4 Animator:

Version: Adobe Character Animator CC 2018

Will be used for: Modelling and animating characters

4.5 GIMP:

Version: GIMP 2.9.6

Will be used for: Cooperation with Photoshop tasks

4.6 Unity:

Version: Unity 2017.3.1f1 (64-bit)

Will be used for: General level design and game development (scripting etc.)

# SECTION 5 — FILE FORMAT

Pictures and Paintings: .pngPushed Maya-Objects: .fbx