



UNIVERSITÀ  
DEGLI STUDI  
DI MILANO

**PONG**  
Playlab fOr inNovation in Games

# DATA MANAGEMENT DOCUMENT

## STRANGER THINGS Secrets of the Upside Down



DEMON PARTY

Game and Level Design  
Academic Year 2019/2020



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**Purpose**

This document presents the guidelines for data management that all project members must comply with. These guidelines are shared with all members without any exceptions. The purpose of this document is to follow the same rules in order to avoid problems due to the use of different software or different versions of them.

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# Summary

<b>1</b>	<b>Software List</b>	<b>5</b>
1.1	Asset Editing Software . . . . .	5
1.2	Development Software . . . . .	5
1.3	Organization Software . . . . .	5
1.4	Environments . . . . .	5
<b>2</b>	<b>Data Types and Format</b>	<b>6</b>
2.1	Text . . . . .	6
2.2	Pictures . . . . .	6
2.3	Sounds . . . . .	6
2.4	Diagrams . . . . .	6
2.5	3D Models . . . . .	6
<b>3</b>	<b>Data Storage and Access</b>	<b>7</b>
3.1	Backup . . . . .	7
<b>4</b>	<b>Directory Structure</b>	<b>8</b>
<b>5</b>	<b>File Naming Conventions</b>	<b>9</b>
5.1	Image Example . . . . .	9
5.2	Image Editing Example . . . . .	9
5.3	Sound Example . . . . .	9
5.4	3D Asset Example . . . . .	9

# 1 Software List

## 1.1 Asset Editing Software

- **Sketch** - version 60 (88103)
- **draw.io** - Online
- **Photoshop CC 2019** - 20.0.6
- **RPG Maker MV** - Version 1.6.1
- **Visual Novel Maker** - Version 1.0.1077

## 1.2 Development Software

- **Unity** - 2018.4.15f1
- **Git** - 2.23.0

## 1.3 Organization Software

- **LaTeX** - 3.14159265-2.6-1.40.20
- **TeXstudio** - 2.12.16
- **Fork** - 1.42.0.0
- **Trello** - Online
- **Google Drive** - Online
- **Discord** - 0.0.225
- **Telegram** - 5.8 (185085)

## 1.4 Environments

We use software not tied to the operating system except for Sketch.

- **Windows 10** - Home v1903
- **macOS** - Catalina 10.15.1

## 2 Data Types and Format

### 2.1 Text

The document is written in L<sup>A</sup>T<sub>E</sub>X so all the new chapters inserted in the document must be written in a *.tex* file and then be included in the *main.tex*. Keep in mind that all the formatting rules are contained in the *main.tex* so if you want to create new documents make a copy of the *main.tex* file and start from that. Documents that act as a draft can be written in *.txt* or *.md* format.

### 2.2 Pictures

Different formats are allowed for the images to be uploaded, but in some cases it's important to respect the dimensions contained below:

Use	Format	Info
Reference Images	.png .jpeg	256 dpi or more
Character Icons	.png	70x70 px
Circumplex	.png	600x600 px
Maps of relations	.png	600x600 px
Vector Graphics	.sketch	-
Draw.io files	.png (export)	-

### 2.3 Sounds

For soundtracks and sound effects of the levels, adopt the *.mp3* format at 128 Kbps.

### 2.4 Diagrams

The diagrams were drawn by draw.io, for any change, go to Google Drive and edit directly the source diagram contained in it, at the end export the diagram according to the rules contained in paragraph 2.2. If you want to add new diagrams, use draw.io and export them according to the rules described in paragraph 2.2, rename it according to the rules contained in chapter 5 and insert it in the appropriate folder according to the rules of chapter 4.

### 2.5 3D Models

For 3D models use the FBX format. Autodesk update their FBX installer regularly and it can provide different results with different versions of their own software and other 3rd party 3D apps. If you have any issues you can revert to 2012.2 if necessary.

### 3 Data Storage and Access

**Data Manager:** Gerard Baholli

The shared data are hosted in a remote repository on GitHub. The data is also constantly synchronized through the Google Drive synchronization and backup service. Moreover, the data are pushed in the remote repository at the end of each day. For new members who need to access data shared by project members, write to `gerardbaholli@live.it`.

#### 3.1 Backup

Data is backed up on a Google Drive shared folder, every Friday evening between 18:00 and 18:30. For each back up a folder is created with today's date as name: `YYYY_MM_AA`. This ensures us a backup version every week.

## 4 Directory Structure

The files in the folder are divided by theme, if you want to access information about a particular character just go to the relating sub-folder of that character and you will find all the material. The structure of the directory must be preserved to allow non-dispersion of the files. It is also important not to create multiple copies of the same file located in different paths, this to make the directory easily accessible to other users.

```
repository
├── characters
│   ├── bad_eleven
│   │   ├── 3D_models
│   │   └── sounds
│   └── ...
├── enemies
│   ├── common
│   │   ├── 3D_models
│   │   └── sounds
│   ├── bosses
│   └── ...
├── levels
│   ├── 01_level
│   │   ├── environments
│   │   ├── sounds
│   │   ├── story_dialogues
│   │   │   ├── dialogues
│   │   │   └── extras
│   └── ...
├── props
│   ├── 01_level
│   │   └── 3D_models
│   ├── ...
│   └── shared
├── documentation
│   ├── milestones
│   │   ├── 01_milestone
│   │   ├── 02_milestone
│   │   ├── 03_milestone
│   │   └── 04_milestone
│   ├── DMD_source
│   ├── LDD_source
│   ├── data_management_document.pdf
│   └── level_design_document.pdf
```

In this tree the main folders are displayed but in them there are other sub-folders that contain the files and keep them in order, distinguishing them by level or by type.



## 5 File Naming Conventions

The purpose of having a convention for file names is to keep the file order constant. Below the general rules to be respected:

- Every file name must respect the format "**fileType\_chapter\_description(\_size\_number)**". The number should be reported in files that have the same description but different contents. Keep care to write every point following the camel case rule. Write the *size* in the files where you should specify it (e.g. vector images) according to the rule widthxheight (e.g. 1280x720). Below the rules to follow for the fileType:

File	fileType
Images	img
Vector Images	vimg
Photoshop project	ps
3D model	3d
Sounds	au
Text note	txt
Videos	vid

- Do not use spaces. Some software will not recognize file names with spaces, and file names with spaces must be enclosed in quotes when using the command line. For this reason never insert a space character ( " ") but instead insert an underscore ( "\_").
- Special characters such as ~ ! @ # \$ % ^ & \* ( ) ' ; < > ? , [ ] { } ' " and | should be avoided.
- When using a sequential numbering system, using leading zeros for clarity and to make sure files sort in sequential order. For example, use "001, 002, ...010, etc." instead of "1, 2, ...10, etc."
- Try to use 30 or fewer characters whenever possible.
- 

### 5.1 Image Example

img\_worldDiagram\_graph\_700x1000.png

### 5.2 Image Editing Example

ps\_character\_elbyCircumplex\_720x720.ps

### 5.3 Sound Example

au\_giantChasm\_ambientSound\_03.mp3

### 5.4 3D Asset Example

3d\_giantChasm\_map\_010.mp3