



Macro-Design Document

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Team 03:

Monticelli Mattia (Lead Project G.D.)

Manca Matteo (Lead G.D.)

Maruccio Federico (G.D.)

Rinaldi Piercarlo (G.D.)

Postal Simone (Lead G.P.)

Lizzio Mario (G.P.)

Brambilla Riccardo (G.P.)

Lauria Giacomo (G.P.)

Esposito Veronica (Lead C.A.)

Freni Davide (C.A.)

Achilli Lorenzo (Lead 3D A.)

Aleh Kryvulia (3D A.)

Alves Francesco (3D A.)

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Game Concept

Timed Out is a **multiplayer cooperative Survival** game for PC platforms where the players have to survive in a **dystopian futuristic city** where **Lifetime** has become the **most valuable** resource.

Player's Lifetime is continuously **decreasing** and in order to **avoid death** they will have to **loot and craft** and manage their moves around the city.

The core aspects of the game will be:

- 1) Satisfy your basic **needs for surviving** by looting and crafting vital items in order to keep your **Lifetime** above zero.
- 2) Managing, crafting and storing resources in the main **Hub/Base**, upgrading it to provide a better fulfillment and start raids in the city.
- 3) **Raids** that take place in the city, generated with a modular square grid, and that present difficulties and obstacles to avoid.

The playable Multiplayer portion of the game is the Raid one, the Base is instead the personal for every player (single-player section).

1. Game Design

- Lifetime and needs
- Object system
- Base and Raids

2. Level Design

- Base
- Dungeons

3. Control and Views

- Player controls
- View per game section

4. Multiplayer Interactions

- Cooperative Dungeons
- Items trade
- Lifetime Sharing

5. Design Documentation

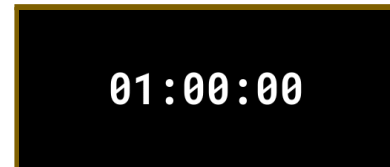
1. Game Design

1.1 Lifetime and Needs

Players status is defined by **two** different types of statistical values, which affects and describes their current conditions.

The **first type** define the **Status** statistics:

- **Lifetime:**
 - Represent the time left to live for players.
 - It keeps decreasing as the players stay in the game.
 - Once this value decreases to zero the player dies.
 - It can be increased by using consumable objects.
 - It can be exchanged and shared between players.
- **Energy:**
 - It's consumed by players performing some actions (movement related).
 - Allow the players to perform defined movement actions.
 - It can be recharged by using consumable objects.
 - It can be recharged in the Hub via interacting with a Cryo Capsule.
 - It has a maximum cap.
 - The maximum cap can be increased in specific ways.
- **BioRAM:**
 - It keeps decreasing as the players keep moving.
 - It has a maximum cap.
 - It can be recharged by using consumable objects.
 - Modify the Lifetime decreasing ratio as the value of the stats decrease itself.

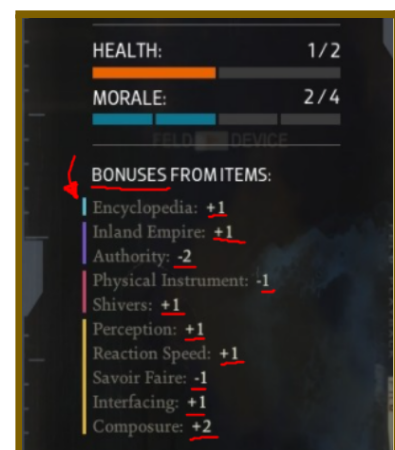


The **second type** define the **Program's PG** statistics:

- These values modify some specific characteristics of the players (es. speed, detectability, ecc..).
- These values are integers and can assume some specific values within a specific range.
- These values can change when a consumable object that satisfies the Status statistic is used, per every consumable a program has to grow and another one has to decrease.

These Programs **influence** each others in **pairs**:

- **BPM:** modify players maximum speed when walking.
- **Stealthiness:** modify the detectability range of players versus the security system.
- **Damage:** reduces damage inputs from Security systems.
- **Alert:** modify the Alert increasing level when players are spotted under [Security Cameras](#).
- **Efficiency:** modify the BioRAM decreasing ratio.
- **Resistance:** expand max Energy cap value.



1.2 Object System

1.2.1 Crafting

Players are able to craft items interacting with a specific object: the **Workbench**.

The Workbench can be **found** in the **Hub/Base** allowing the players to craft every possible obtainable item in game.

The crafting system is based on **recipes**, the players can select on a menu what to craft by choosing from a list.

A single recipe has to show the amount of objects required for the craft and a description on the basic functioning of the desired item.



1.2.2. Looting

Players can pick up and take items from the surrounding world and store them in their **inventory**.

The objects can be useful for different purposes (especially for crafting needs), in the game those items can be spawn in two different ways:

- **Chests:** players can find multiple objects in it and select what to pick in their inventory.
- **Ground Spawns:** players can find a single type of object in it..

1.2.3.Inventory

Every player has an individual inventory which garant the possibility to bring and collect items with them in Raids and in the Hub/Base, the inventory is also capable of transporting objects from the dungeon phase to the base one (and vice versa).



The individual inventory presents the following characteristics:

- **Stacks:** the inventory is divided in stacks, in a stack only a single object type can be stored (the stack does not present any kind of cap limitation).
- **Strength:** the maximum amount of objects that can be stored in the inventory is limited by the Maximum Strength value.

Every object presents a specific Weight value, the summary of the object's weights determine the Weight Transported.

1.2.4. Gadgets

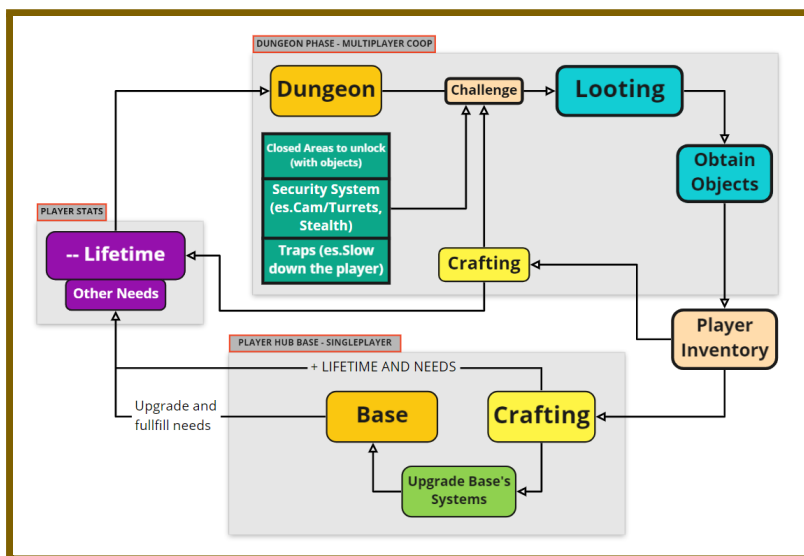
Players are able to equip particular gadgets in their inventory.

These items are defined as **Consumable** Gadgets:

can be crafted, these objects are single-use consumables which allow the players to use some particular abilities during the game (Force Shield to protect from agents attack, Invisibility to pass cameras, item to lower security level, ecc..).

1.3 Base and Raids

The players in the game have to constantly switch between the Hub phase, where they can craft and obtain objects to satisfy their needs, and the scavenging phase in Dungeons, where they can loot useful objects to bring back to their base.



2. Level Design

2.1 Base (Singleplayer)

The singleplayer phase of the game takes place in the player's main Base.

In this area the players can craft, build and store their loot to prepare and organize the following raid action in the city.

More specifically in the base players have access to the following tools:

- **Cryogenic Capsule:** recharge the max Energy value but decurt the Lifetime.
- **3D Fabricator:** allows the players to craft new objects combining the ones in their inventory.
- **Programs PC Station:** allow the players to amplify the range of single Programs.
- **Hub Storer:** these chests allow the players to store all the items and consumable found and crafted during the ride session.
- **Dungeon Terminal:** terminal found during the raid session, allows players to move between the hub and the raid session. The terminal is also used in the hub to start a raid session with another player.

2.2 Raids in Dungeon (Multiplayer)

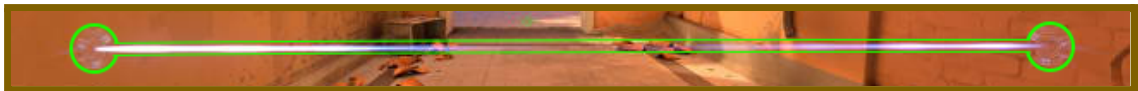
Players in order to collect objects, needed to survive, have to scavenge and raid parts of the city.

Players can enter in a dungeon **2 users** per time and cooperate together in order to overcome difficulties and threats that the environment provides.

The **challenge** in the levels is provided by the following city systems:

- **Cameras Security System:**
The cameras are *static* objects that can *rotate* on an axis, they present a *conical field of view* for detection.
If players stay in the field of view of a camera an *Alert Bar* value has to increase every second.
- **Robot Security Agents:**
The agents patrol part of the city following a determined pattern and they can attack the players within their aggro range.
They can interact with the player by attacks from range.
- **Alert Bar:**
The Alert Bar is an indicator which tracks how much time the players stay in the camera's field of view. The higher the value is, the larger the Agent's aggro range becomes.
Once reached the maximum level of Alert all agents in the map hunt the players even if they do not have a direct line of sight.
- **Force Fields Barriers:**
The fields are energetic walls which prevent players from passing on the other side, these walls are obstacles that lock some areas of interest for the players.
The Force Field can be deactivated by players turning off determined **switches** or **pressure plates** in the map.

- **Static Turrets:**
Static turrets that interact with the players as they enter their firing range.
The range of turrets can be modified based on the player's Stealthiness and Alert Bar current value.
- **Tripwires:**
Line connected between two walls, it can be presented in two different types:
 - **Activate Security:** if the player passes through the tripwire some other static challenges activate.
 - **Damaging:** if players or Security Agents pass on them, they receive damages. They can be turned on and off by pressing a designated **switch**.



3. Control and Views

3.1 Player Controls

The players in game are able to execute the following movement and actions orders:

- **Walking:** this action is the basic movement pattern, it can be influenced by the BPM Modifier, it won't consume Energy.
- **Sprinting:** this action allows players to move faster than when walking, it consumes Energy, it won't be influenced by BPM Modifier.
- **Jumping:** this action allows players to jump and avoid some obstacles on the ground, it consumes Energy.
- **Crouching:** this action allows players to be less visible to the city's security system, it consumes Energy.

3.2 View per Game Section

- During the Base/Hub phase the main camera has to be presented with a **TopDown rassicinate view** and follow the player, the camera is also able to rotate around the player maintaining constant its height.
- During the Raid phase the main camera has to be a third person presented with a **TopDown more distant view** and follow the player, the camera is also able to rotate around the player maintaining constant its height.

4. Multiplayer Interactions

During the dungeon session **the player can play with one other player**, interacting in new modes between players and with the game world:

- **Exchange:** Share time with your teammates to keep them alive.
- **Unique Interactions:** Interact with your teammate in the game world in various ways to unlock new areas and better loot, such as coordinated pressure plates interactions to shut down Force Fields.
- **Alert Bar:** The Alert Bar during the Raid session is shared between both players, when one of them is under the Security Cameras FoD the alert bar increases for everyone.

5. Other Documentation

1. Miro Board Invitation Link:

<https://miro.com/welcomeonboard/60O6DCs2NrocFekfYkctw6Kbaw8Fwt5f4yCgtJ07nZpkriANsxKzFIL2xse72e2q>