

Team 6
 Chisom Osuji
 Rod Hermiz
 Kevin Learned
 Luke Geiger

1. Title Page

1.1. Name

Captured: Based on the movie Taken

1.2. Copyright Information-Copy cats are frowned upon

Overall plot of the video game takes inspiration from the movie Taken starring Liam Neeson but, it does not infringe upon the copyright of the movie.

1.3. Version

Team 6-Loose Cannon Studios , 12/16/2015

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2. Design History – This is a change listing quickly describing each major version and changes.

Version	Date	Description of Change
1	12/1/2015	No longer have a defuse bomb as an objective. One objective per level.
2	12/7/2015	Only 3 main characters in the game, the player, daughter and the enemy leader. One basic enemy type.
3	12/10/2015	Decision made to only incorporate prologue and level 1 due to time constraints
4	12/12/2015	Final decision for all sections of the

		document
5	12/15/2015	Small edits made

3. Section I - Game Overview

3.1. Game Concept

The game is based off the movie Taken. Not all aspects of the movie are in the game but, the main story, a daughter being kidnapped and her father having to save her from her kidnappers is also the main plot of Captured.

3.2. Genre

Captured is a action FPS.

3.3. Target Audience

Anyone who likes FPS games or action movies. We have rated our game T for teen/PG-13.

3.4. Game Flow Summary

The player, for the most part, controls the flow of the game. He/she can stay in one level until they want to move onto the next. To access other levels, the player must finish the main objective of the level they are in. Players cannot move back to levels they have already completed.

3.5. Look and Feel

The visual style of the game is very similar to other FPS. Our team was limited too prefab objects and environments due to time. This limits the creative ability of the team to make a more unique playing experience.

3.6. Project Scope

3.6.1. Number of locations

There will be 2 main locations that the player will be in. The first is the daughter's apartment, not much will happen here because there are no enemies present.

The second location is the base of the enemy group who took your daughter. This is where all the combat will happen within the game. The player can move through a section of the base during one level and have access to the other section in another level. This makes the base explorable but, not all in one level.

3.6.2. Number of levels

The game will consist of 3 main levels:

Prologue - Player will start in the daughter's apartment.

Base Entrance Level - Player will enter the level at the entrance of the group's base. The main objective is to rescue your daughter.

Boss Level - In the final level, the player will face off against the group's leader and some of his lackies.

3.6.3. Number of NPC's

There are 3 different types of non playable characters:

Daughter - There is only one daughter in the game

Basic Enemy - There are multiple basic enemy models throughout all levels except the prologue.

Boss Enemy - There will be only one boss enemy model and it will be located in the last level of the game.

3.6.4. Number of weapons

There will be 6 total weapons that players can equipped and use to damage and kill enemies. These items are listed along with other items available to the player in Section 4.2.3.

4. Section II - Gameplay and Mechanics

4.1. Gameplay

4.1.1. Game Progression

For the most part, players are in control of the game progression. They can race through the level and complete the main objective or they can explore the level, find all the enemies and then move on.

The level changes when the main objective for that level is completed and the game is finished when the final objective is accomplished.

4.1.2. Mission/challenge Structure

The mission structure for this game is very simple, as stated in the above section, each level has a main objective and when that main objective is completed, the player moves on to the next level.

4.1.3. Objectives

Prologue - Find any clues that will help you lead to the location of your daughter and her kidnappers.

Base Entrance Level - Find the location of your daughter and reach her to start the next level.

Boss Level - Defeat the enemy leader and his lackies to escape the enemy base.

4.1.4. Play Flow

The flow of the game is dictated by the player. If the player wants to look around the level and not do the objective, they are allowed to do so and will only move on when they complete the main mission for the level they are in.

4.2. Mechanics

4.2.1. Physics

The physics in the game is design to be similar to physics in the real world. The gun physics is implemented using scripts from the FPS Unity kit.

4.2.2. Movement

4.2.2.1. General Movement

The player can move forward, backward, left and right. The movement mechanics are made to simulate a human being. The movement of the character is very similar to other FPS and this also includes similar controls as well. WASD on the keyboard.

4.2.2.2. Other Movement

Other movements that help to better simulate a human include:

- Jumping
- Crouching
- Reloading weapons
- Hand to hand combat

4.2.3. Objects

4.2.3.1. Weapons

Handgun
Assault Rifle
Shotgun
RPG Launcher
Bow

4.2.3.2. Items

Health Packs
Soda cans
Apples

4.2.3.3. Ammo

Arrows
Explosive arrows
Grenades
Handgun Magazines
Assault Rifle Magazines

4.2.4. Combat

4.2.4.1. Gun combat

The combat for the guns will be implemented using the scripts provided in the FPS Unity Asset.

4.2.4.2. Hand to hand combat

There is no hand to hand combat implemented into the final version of the game.

4.2.5. Economy

There is no economy system implemented in the game. The player must find weapons and other items in the level.

4.3. Game Options

No special options will be available to the player. There is only one difficulty and all game specifications are set for the player.

4.4. Replaying and Saving

No saving feature is implemented in the game. When the player leaves the application,

5. Section III – Story, Setting and Character

5.1. Story and Narrative

5.1.1. Back story

The back story to the game can be assumed to be similar to the movie the game is based on, Taken. The player is a retired military operative who finds that his daughter is kidnapped and he is the only one with the skill to save her.

5.1.2. Plot Elements

The list of plot elements include:

1. Arriving at your daughters apartment
2. The clue to finding your daughter's kidnappers is found
3. You arrive at the base of the enemy group who took your daughter
4. The location of your daughter within the base is found
5. You arrive at the location of your daughter
6. The leader of the group make himself known
7. You arrive at the location of the leader
8. The leader is defeated
9. The game ends

5.1.3. Game Progression

As stated in the above section, The game progression is highly influenced by the player's action, if they don't complete the main objective then they don't move on to the next level and the main story does not progress.

5.1.4. License Considerations

The game was created with the licensing in mind as a whole but, mainly with the story and the implementation with Unity. Since the story was influenced by the movie Taken, our team made sure we did not infringe on any licensing agreements or copyright properties, Similar consideration was taken into account in regards to the assets that were used in the implementation of the game in Unity 5. Our game is made with FPS Unity Asset kit.

5.2. Game World

5.2.1. General look and feel of world

The world that the game is in consists of two main areas, the daughter's apartment and the enemy group base. The base is where the combat happens so it is more open than the apartment to allow the player to move more freely.

5.2.2. Area #1 - Daughter's Apartment

5.2.2.1. Physical Characteristics

Described in the Level Design Document.

5.2.2.2. Levels that use area

Prologue

5.2.2.3. Connections to other areas

There are no connections to other areas except when the player finds the clue to finding his daughter then, they move on to the next level which is set in the enemy base.

5.2.3. Area #2 - Enemy Base

- 5.2.3.1. Physical Characteristics
Described in the Level Design Document.
- 5.2.3.2. Levels that use area
Entrance Level
Boss Level
- 5.2.3.3. Connections to other areas
Similar to the apartment, there are no connections to other area except for after completing the main objective. The base is split into different sections which players can explore in the Entrance and Boss level.

5.3. Characters

5.3.1. Character #1 - Main Character

- 5.3.1.1. Backstory
Similar to that in the movie Taken. He is a retired military officer who has a daughter in college. The user will learn the back story of all the characters from a prologue story that is displayed before the game is started.
- 5.3.1.2. Look
 - 5.3.1.2.1. Physical characteristics
Screenshots of the character model are included in Section 10.1.
 - 5.3.1.2.2. Animations
All the characters have the same animations for walking, running, jumping, crouching, and reloading.
- 5.3.1.3. Relevance to game story
This character is the character that players play as. Without this character there would be no playable game.
- 5.3.1.4. Relationship to other characters
His daughter is the one who was kidnapped by a terrorist group from his heyday. The leader of the group was the one who ordered the kidnapping and for that, he must pay.
- 5.3.1.5. Statistics

5.3.2. Character #2 - Daughter

- 5.3.2.1. Backstory
Similar to that in the movie Taken. She is the daughter of a retired military officer who is in college. The user will learn the back story of all the characters from a prologue story that is displayed before the game is started.
- 5.3.2.2. Look
 - 5.3.2.2.1. Physical characteristics
Screenshots of the character model are included in Section 10.1.
 - 5.3.2.2.2. Animations
All the characters have the same animations for walking, running, jumping, crouching, and reloading.

- 5.3.2.3. Relevance to game story
Her kidnapping is the main plot for the game story. Without her being captured by the terrorist group, there would be no story.
- 5.3.2.4. Relationship to other characters
She is the daughter to the main character and is kidnapped by the main antagonist, the leader of the group.
- 5.3.3. Character #3 - Leader of terrorist group
 - 5.3.3.1. Backstory
He was put into prison by the main character when he was in the military. He has escaped and formed a terrorist group, who ultimately kidnap the main character's daughter for revenge.
 - 5.3.3.2. Look
 - 5.3.3.2.1. Physical characteristics
Screenshots of the character model are included in Section 10.1.
 - 5.3.3.2.2. Animations
All the characters have the same animations for walking, running, jumping, crouching, and reloading.
 - 5.3.3.3. Relevance to game story
He is the main antagonist in the game. He is the mastermind behind the kidnapping and must be taken out.
 - 5.3.3.4. Relationship to other characters
He kidnapped the main character's daughter.

6. Section IV – Levels

6.1. Level #1 - Prologue

- 6.1.1. Areas used
The prologue only takes places in Area #1, the daughter's apartment. The purpose for the level is to tell backstory and show the player the reason for playing the game.
- 6.1.2. Main objective
The main objective to this level is to find any clues that could lead you to your daughter and her kidnapper.
- 6.1.3. Specific details
See the Level Design Document for all the details of the Prologue level.

6.2. Level #2 - Entrance Level

- 6.2.1. Areas used
This level also only takes place in one area, Area #2, the groups base. Although, there are 2 levels that use Area #2 and this level only takes place in a section of the area. When the player moves to the next level, they will then play in the other section in the area.
- 6.2.2. Main objective
The main objective in this level is to find your daughter and get to her location.
- 6.2.3. Specific details

See the Level Design Document for all the details of the Entrance level.

6.3. Level #3 - Boss Level

6.3.1. Areas used

The area used in this level is the other section of Area #2 that was not used in Level 2.

6.3.2. Main objective

The main objective is to escape the base with your daughter and your only way out is through the leader of the terrorist group.

6.3.3. Specific details

See the Level Design Document for all the details of the Boss level.

7. Section V - Interface

7.1. Visual System

7.1.1. HUD

Players are able to see their current health and ammo in the weapon that is in their hand. There is no minimap or inventory in the HUD view.

7.1.2. Menus

There are no menus in the game.

7.1.3. Rendering System

7.1.4. Camera

Since it is a first person shooter, the camera will also be the eyes of the main character. The player can move the camera around and the camera can also move when the player moves the character around

7.1.5. Lighting Models

7.2. Control System

The player controls the game, specifically the main character by the keys WASD and the mouse to move him around. Other controls like firing the gun and reload are also implemented with the left mouse button and R respectively. The player can also use C and the space bar to crouch and jump as well.

7.3. Music

There is no music in the game.

7.4. Sound Effects

There are sound effects for the weapons in the game and stepping sound effects for the main character. There is also a sound clip for reloading weapons.

8. Section VI - Artificial Intelligence

8.1. Enemy AI

There are two types of enemies in the game, the basic enemy and the boss enemy. The AI for both are similar and but, the boss enemy is designed to be harder to beat. To do this, his decisions are quicker and his attacks are more varied and stronger.

8.2. Friendly Characters

Once you have reached your daughter, she will begin to follow you and help you fight the enemies if given the chance to. Besides her, there is no other characters that help the player in combat.

8.3. Support AI

8.3.1. Player and Collision Detection

8.3.2. Pathfinding

9. Section VII – Technical

9.1. Target Hardware

Generally content developed with Unity can run pretty much everywhere.

How well it runs is dependent on the complexity of your project. More detailed requirements:

Desktop:

OS: Windows XP+, Mac OS X 10.7+, Ubuntu 12.04+, SteamOS+

Graphics card: DX9 (shader model 2.0) capabilities; generally everything made since 2004 should work.

CPU: SSE2 instruction set support.

Web player supports IE, Chrome, Firefox, Safari and others.

iOS: requires iOS 6.0 or later.

Android: OS 2.3.1 or later; ARMv7 (Cortex) CPU or Atom CPU; OpenGL ES 2.0 or later.

WebGL: Desktop version of Firefox, Chrome or Safari

Windows Phone: 8 (available but deprecated for 5.2), 8.1 or later

Windows Store Apps: 8 (available but deprecated for 5.2), 8.1 or later

9.2. Development hardware and software

OS: Windows XP SP2+, 7 SP1+, 8, 10; Mac OS X 10.8+.

Windows Vista is not supported; and server versions of Windows & OS X are not tested.

GPU: Graphics card with DX9 (shader model 2.0) capabilities. Anything made since 2004 should work.

The rest mostly depends on the complexity of your projects.

Additional platform development requirements:

iOS: Mac computer running minimum OS X 10.9.4 version and Xcode

6.x.

Android: Android SDK and Java Development Kit (JDK).

Windows 8/8.1 Store Apps / Windows Phone 8/8.1: 64 bit Windows 8.1 Pro and Visual Studio 2013 Update 2+.

WebGL: Mac OS X 10.8+ or Windows 7 SP1+ (64-bit editor only)

9.3. Game Engine

Unity 5

9.4. Scripting Language

Visual Studio C#

10. Section VIII – Game Art

All the art for the objects in the game were supplied by the FPS Unity Asset kit that one of our team members bought, by free asset kits that were found online or by assets already supplied by Unity for free. Below are various screenshots of character models, environments and items in the game.

10.1. Characters

Guard:



10.2. Environments

Daughter's Apartment:



Enemy Base:



10.3. Equipment

Shotgun:



Assault Rifle:



Crossbow:



Rocket Launcher:



11. Section IX - Secondary Software

11.1. Editor

The editor supplied in the Unity development program was the only editor used in the creation of this project.

11.2. Installer

11.3. Update software

There is no update software implemented into this game except for the updates that are required by Unity.

12. Section X - Management

12.1. Detailed Schedule

12.2. Budget

There was no budget for this project but, a Unity Asset kit was bought by one of our team members to help create the game.

12.3. Risk Analysis

Number	Risk Description	Probability (High, Medium, Low)	Impact on Project
1	Different developing tools being used	Low	High
2	Insufficient understanding of tools	Medium	High
3	Loss of team member	Low	Low
4	Progress between members is not being properly tracked	High	High
5	Uneven distribution of work	Medium	Medium
6	Project's needs are not being met	Medium	High
7	Major design change	High	High
8	Missed Meetings with group	High	Medium
9	Deadlines not being met	Medium	High
10	Compatibility of product with other technologies	Low	Medium

12.4. Test Plan

The test plan for this project was integrated into your development phase. Our team decided that this would be the best way to ensure that we would have enough time to produce a quality product by the due date.

13. Appendices

13.1. Asset List

13.1.1. Art

13.1.1.1. Model and Texture List

Main Character

Daughter

Basic Enemy

Enemy Leader

13.1.1.2. Animation List

Walking

Running

- Jumping
- Crouching
- Reloading
- 13.1.1.3. Effects List
 - Grenade explosion
 - Explosive Arrow explosion
 - Bullet hit
- 13.1.1.4. Interface Art List
- 13.1.2. Sound
 - 13.1.2.1. Environmental Sounds
 - 13.1.2.2. Weapon Sounds
- 13.1.3. Unity Assets
 - 13.1.3.1. Advanced Shooter Kit (with scripts)
 - 13.1.3.2. Animatii
 - 13.1.3.3. Free Furniture Set
 - 13.1.3.4. Furniture_ges1