

Development requirements specification

Header

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setting: superheroes

chip: geolocation/camera

Introduction

This terms of reference describes the development of a superhero simulator game where the player is a superhero and the camera

is used to track the face and transfer facial expressions to the hero to interact with other players and AI, as well as a microphone and/or chat for communication.

Tasks

- Develop a superhero simulator game where the player is a superhero, and the camera is used to track the face and transfer facial expressions to the hero to interact with other players and AI.
- Develop simulation mechanics, interactions between players
- Develop the concept of the game world, superhero abilities
- Develop a system for capturing the player's facial expressions via the camera to the game character
- Develop a server chat

Functional Requirements

- Game world
 - Filling
 - Personalization stores for in-game currency
 - Landforms
 - Weather.
 - The city of
 - buildings
 - Transportation
 - Opportunities to interact with players
 - Quests
 - Items
 - AI characters
 - Behavioral artificial intelligence
 - Communication with players
 - Battles
- Superhero Simulation
 - Special abilities
 - Health
 - Protection
 - Speed
 - Strength
 - Level
- Character customization
 - Appearance
 - Weapons
 - Special abilities
 - Background

- World simulation physics
- The player's facial expressions capture system via the camera to the game character
 - Mimic Tracking System
 - Simulation of the superhero's facial expressions based on the player's facial expressions
- Game chat
 - Text
 - Voice chat (proximity chat)
- Simulation of fights between players and/or AI
 - Ability interactions
 - Synergies
 - Blocking
 - Hand-to-hand combat
 - Armed combat
 - Melee combat
 - Ranged combat
- Character upgrade system
 - Skills for currency and skill points
 - Statistics upgrades
 - Special ability upgrades

Non-functional requirements

- Servers for storing user data, hosting game servers, simulating the world, calculating AI

Addons

Gameloop