# Техническое задание на программу для ЭВМ «MMORPG «Убить город»» версия 1.

# 1. Описание

Программа представляет собой клиент-серверное игровое приложение (десктопный и web - клиенты).

Жанр игры: Cyberpank Quest RPG

Сценарий игры и игровые техники описаны в разделе «Сценарий».

Дизайн игрового мира и персонажей – в разделе «Дизайн».

Режим графики: двумерный (в первой версии).

# 2. Логика работы

Взаимодействие между клиентскими приложениями и сервером происходит по протоколу http. Бизнес-логика приложения располагается на сервере, клиентские приложения отвечают только за отрисовку по результатам запроса к серверу.

В первой версии режим игры «полу-пошаговый», дискретизированный, то есть, в течение некоторого периода времени собираются запросы от клиентов, затем обрабатываются одновременно, как результат формируются ответы и возвращаются результаты каждому из клиентов - ?

Запросы логгируются только за последний час (ошибочные логгируются отдельно).

Схема аутентификации в первой версии простая (логин-пароль, Bearer token).

Система кеширования для минимизации запросов в БД.

# 3. Требования

Сервер должен обрабатывать не менее 300 запросов в секунду. Максимальное время обработки запроса не должно превышать 0,5 сек.

Ограничение авторизаций пользователя: не более трёх неудачных попыток за 10 минут. Уведомление о попытках неудачных авторизаций после десяти подряд.

Web и Desktop клиента не должны требовать установки дополнительного ПО (кроме стандартного, например, DirectX).

# 4. Технологии

## 4.1. Сервер

* EntityFramework
* ASP .NetCore
* .Net 6.x

## 4.2. Базы данных

* PostgreSQL

## 4.3. Тестирование

* XUnit
* Moq

## 4.4. Web-client

* ASP .NetCore
* ReactJS или AngularJS
* Html
* Css
* JQuery

# 5. Лицензирование

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Version 2.0, January 2004

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Сервер предоставляет API для взаимодействия с базой данных (получение/сохранение данных о игроке, персонажах, игровых картах, вспомогательных данных) и реализации бизнес-логики игры (взаимодйствий с игровым миром и другими персонажами). Отрисовка выполняется полностью на клиентской стороне.