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

# 1. Описание

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

Жанр игры: MMORPG / Single RPG (режим выбирается при создании персонажа, потом поменять нельзя)

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 работает по протоколу http(s), должен обрабатывать не менее 3000 запросов в секунду, время ответа не должно превышать 30 мс.

Запросы клиента и браузерной версии по возможности группируются.

Авторизация двухфакторная, возможность авторизации через ВК.

Интеграция с комплексом «Лабиринт»

Графика в первой версии двухмерная

# 4. Технологии

## 4.1. Сервер

* EntityFramework
* ASP .NetCore
* .NetCore 6.x +

## 4.2. Базы данных

* PostgreSQL

## 4.3. Тестирование

* XUnit
* Moq

## 4.4. Web-client

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

## 4.5. Клиент

* SqLite
* .Net 6+
* HttpClient

# 5. Лицензирование

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Version 2.0, January 2004

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# 8. Сервер

## 8.1. Описание

Представляет собой серверное приложение, выполняющее функции:

- работа с базой данных

- выполнение периодических заданий

- аутентификация и авторизация пользователей

- API для работы пользователей из интерфейса десктопного и web клиентов

## 8.2. API

### 8.2.1. Персонажи

#### 8.2.1.1. Get

Метод принимает параметрами страницу, размер страницы, поле сортировки, фильтры: по имени персонажа, имени пользователя, по датам: создания, последнего входа в игру (от - до), по группе (клану), токен авторизации (в заголовках). Возвращается список проектов текущего пользователя. Сигнатура:

***GET /api/v1/person/?name=null&userName=null&size=10&page=0&sort=null&isLeaf=null&lastEnterDateBegin=null&lastEnterDateEnd=null&createDateBegin=null&createDateEnd=null&groupId=null***

***Response:***

***{***

***IEnumerable<Person> Persons;***

***}***