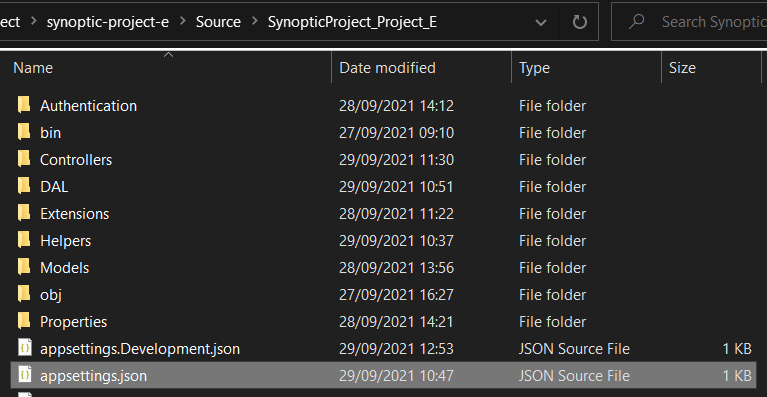
# Setup

Before running for the first time, take due note of the appsettings.json file, located in the SynopticProject\_Project\_E folder.



Inside it is a field named “AppSettings”. It is an object containing additional fields which can be configured to suit the environment the application will be deployed to. The fields are defined as follows:

|  |  |  |
| --- | --- | --- |
| Field Name | Field Type | Description |
| ConnectionString | String | A MongoDB connection string to connect to. Default value is localhost. |
| DatabaseName | String | The name of the database to store collections in. |
| DefaultSuperUser | Object | An object detailing the default Super User. On app start up, if no administrator account exists, one will be created with these details. |

## Default Super User

The default super user object is defined as follows (All fields are required):

|  |  |  |
| --- | --- | --- |
| Field Name | Field Type | Description |
| CardId | String (16 characters) | The card ID (alphanumeric, 16 characters) |
| PIN | String (4 characters) | 4 digit PIN |
| EmployeeId | 16-bit Integer | Unique employee ID |
| FirstName | String (50 characters) | User’s first name |
| Surname | String (50 characters) | User’s surname |
| EmailAddress | String(50 characters) | User’s email address |
| MobileNumber | String (20 characters) | User’s mobile number |

# Authentication

Authentication to the API uses Basic Authorization, thus a Basic Authorization Header is required to make requests. The Authentication string is UTF-8 Base64 encoded, with a colon separating the Card ID and the PIN. For example, a card ID of “0000111122223333” with PIN “2468” would be “0000111122223333:2468” encoded to UTF-8 Base64.

Example Header:

*Authorization: Basic MDAwMDExMTEyMjIyMzMzMzoyNDY4*

Next, a login request should be sent to /*Authenticate/Login/* to perform a handshake with the API. This will start the user’s session. If a user doesn’t send any requests within 5 minutes of the last, their session will end and they will need to log in again.

## Registering

If you cannot login, the server will likely respond saying the credentials are invalid or the user needs to register. You can submit a request to the /*Authenticate/Register/* endpoint to register. You will need to submit a [User Register JSON Object](#_User_Register_JSON) to register the details – note that this is the only method that doesn’t require a Basic Authorization header. Once completed, you will be able to log in.

## Registering an Admin

To create an admin, you will need to login as an admin user as only admins can create other admins. To create an admin, submit a [User Register JSON Object](#_User_Register_JSON) to */User/CreateAdmin/*. If an admin doesn’t exist, you can use the default admin user.

## Logging out

To log out, submit an empty POST request to */Authenticate/Logout/* and the server will respond with “Goodbye”.

# Endpoints

|  |  |  |  |
| --- | --- | --- | --- |
| Endpoint | HTTP Verb | Body | Description |
| /Authenticate/Login/ | POST | [User Credentials](#_User_Credentials) | Used to login to the API. This endpoint must be called to allow other actions. |
| /Authenticate/Register/ | POST | [User Register](#_User_Register_JSON) | Used to register users. Does not require Basic Authorization header. |
| /Authenticate/Logout/ | POST | None | Used to logout a user. |
| /User/?cardId=[CARD\_ID] | GET | None | Get a user by card ID. cardId is a query parameter. Admin users can retrieve the information of any user, however a standard user can only retrieve their own. |
| /User/CreateAdmin/ | POST | [User Register](#_User_Register_JSON) | Create an admin user. This action can only be performed by other admin users. |

# JSON Objects

## User Credentials

|  |  |  |
| --- | --- | --- |
| Field Name | Field Type | Description |
| CardId | String (16 characters) | The card ID (alphanumeric, 16 characters) |
| PIN | String (4 characters) | 4 digit PIN |

## 

## User Register

Used for registering users and creating admin users.

|  |  |  |
| --- | --- | --- |
| Field Name | Field Type | Description |
| CardId | String (16 characters) | The card ID (alphanumeric, 16 characters) |
| PIN | String (4 characters) | 4 digit PIN |
| EmployeeId | 16-bit Integer | Unique employee ID |
| FirstName | String (50 characters) | User’s first name |
| Surname | String (50 characters) | User’s surname |
| EmailAddress | String(50 characters) | User’s email address |
| MobileNumber | String (20 characters) | User’s mobile number |