

## Backend API Framework

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Define the APIs you expect in your backend service (RESTful services). Each API should include the URI, HTTP method, request params/body, and response code/body.

AUTH ROUTES (/auth)	
Resource Operation HTTP Method URI (HTTP)	Request Parameter or Data Response Code
Register an account  POST  /register	<u>Request Parameter</u> <pre>{ "data": {     "firstName": &lt;string&gt;, "lastName": &lt;string&gt;, "email": &lt;string&gt;, "password": &lt;string&gt;, "serverPath": "/users",     "picturePath": &lt;string&gt;, "picture": &lt;image&gt;, "location": &lt;string&gt;, "occupation": &lt;string&gt;, }}</pre> <u>Response Code</u> <u>Success</u> <pre>{ "status": 201, "data": { "message": "Successfully registered user!" } }</pre> <u>Failure</u> <pre>{ "status": 409, "data": { "message": "This email is already in use!" } }</pre> <pre>{ "status": 500, "data": { "message": &lt;err.message&gt; } }</pre>
Login (authenticates user and gets a token)  POST  /login	<u>Request Parameter</u> <pre>{     "headers": { "Content-Type": "application/json" },     "data": { "email": "example@gmail.com" "password": "eXaMp!e11" } }</pre> <u>Response Code</u> <u>Success</u> <pre>{ "status": 200,   "data": {     "token": &lt;some token&gt;     "user": {</pre>

	<pre>"_id": &lt;some id&gt;, "firstName": &lt;string&gt;, "lastName": &lt;string&gt;, "email": &lt;string&gt;, "password": &lt;string&gt;, "picturePath": &lt;string&gt;, "friends": &lt;array of user ids&gt;, "location": &lt;string&gt;, "occupation": &lt;string&gt;, "viewedProfile": &lt;number&gt;, "impressions": &lt;number&gt;, "twitterHandle": &lt;string&gt;, "linkedInHandle": &lt;string&gt;, }}}</pre> <p><b>Failure</b></p> <pre>{ "status": 400, "data": { "message": "Invalid Credentials - Wrong Email or Password" }} { "status": 500, "data": { "message": &lt;err.message&gt; }}</pre>
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<u>USERS ROUTES (/users)</u>	
Resource Operation HTTP Method URI (HTTP)	Request Parameter or Data Response Code
Get all users  GET  /	<u>Response Code</u> <u>Success</u> <pre>{ "status": 200, "data": { "allUsers": &lt;array of user data objects&gt; } }</pre> <u>User Data Object Model:</u> <pre>{ _id, firstName, lastName, picturePath }</pre> <u>Failure</u> <pre>{ "status": 404, "data": { "message": &lt;err.message&gt; } }</pre>
Get User  GET  /:id	<u>Response Code</u> <u>Success</u> <pre>{ "status": 200,   "data": {     "user": {       "_id": &lt;some id&gt;, "firstName": &lt;string&gt;, "lastName": &lt;string&gt;,       "email": &lt;string&gt;, "password": &lt;string&gt;, "picturePath": &lt;string&gt;, "friends": &lt;array of user ids&gt;,       "location": &lt;string&gt;, "occupation": &lt;string&gt;, "viewedProfile": &lt;number&gt;, "impressions": &lt;number&gt;,       "twitterHandle": &lt;string&gt;, "linkedInHandle": &lt;string&gt;,     }   } }</pre> <u>Failure</u> <pre>{ "status": 404, "data": { "message": &lt;err.message&gt; } }</pre>
Get User Friends  GET  /:id/friends	<u>Response Code</u> <u>Success</u> <pre>{ "status": 200, "data": { "friends": &lt;array of user's friends&gt; } }</pre> <u>User Friend Data Object Model:</u>

	<pre>{ _id, firstName, lastName, occupation, location, picturePath }</pre> <p><b>Failure</b></p> <pre>{ "status": 404, "data": { "message": &lt;err.message&gt; } }</pre>
<p>Add/Remove Friend</p> <p><b>PATCH</b></p> <p><b>/:id/friends</b></p>	<p><b>Request Parameter</b></p> <pre>{ "headers": { "Authorization": `Bearer \${token}` , "Content-Type": "application/json" } }</pre> <p><b>Response Code</b></p> <p><b>Success</b></p> <pre>{ "status": 200, "data": { "loggedInUserFriends": &lt;array of friends&gt;, "otherUsersFriends": &lt;array of friends&gt; } }</pre> <p><b>Friend Data Object Format</b></p> <pre>{ _id, firstName, lastName, occupation, location, picturePath }</pre> <p><b>Failure</b></p> <pre>{ "status": 404, "data": { "message": &lt;err.message&gt; } }</pre> <pre>{ "status": 405, "data": { "message": "You cannot add yourself as a friend." } }</pre>
<p>Update User Information</p> <p><b>PATCH</b></p> <p><b>/:id</b></p>	<p><b>Request Parameter</b></p> <pre>{   "headers": { "Authorization": `Bearer \${token}` }   "data": {     "_id": &lt;some id&gt;, "firstName": &lt;string&gt;, "lastName": &lt;string&gt;, "serverPath": "/users", "picturePath": &lt;string&gt;,     "picture": &lt;image&gt;, "location": &lt;string&gt;, "occupation": &lt;string&gt;, "twitterHandle": &lt;string&gt;,     "linkedInHandle": &lt;string&gt;,   } }</pre> <p><b>Response Code</b></p> <p><b>Success</b></p> <pre>{ "status": 200,   "data": {     "updatedUser": {       "_id": &lt;some id&gt;, "firstName": &lt;string&gt;, "lastName": &lt;string&gt;,       "email": &lt;string&gt;, "password": &lt;string&gt;, "picturePath": &lt;string&gt;, "friends": &lt;array of user ids&gt;,       "location": &lt;string&gt;, "occupation": &lt;string&gt;, "viewedProfile": &lt;number&gt;, "impressions": &lt;number&gt;,</pre>

	<pre>        "twitterHandle": &lt;string&gt;, "linkedInHandle": &lt;string&gt;,     }}}  <u>Failure</u> { "status": 404, "data": { "message": &lt;err.message&gt; }}</pre>
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POSTS ROUTES (/posts)	
Resource Operation HTTP Method URI (HTTP)	Request Parameter or Data Response Code
Create a post  <b>POST</b>  /	<p><b><u>Request Parameter</u></b></p> <pre>{ "data": {   "userId": &lt;some user ID&gt;, "description": &lt;string&gt;, "serverPath": "/posts", "picturePath": &lt;string&gt;,   "picture": &lt;image&gt;, "attachment": &lt;file&gt;, "occupation": &lt;string&gt;, }}</pre> <p><b><u>Response Code</u></b></p> <p><b><u>Success</u></b></p> <pre>{ "status": 201,   "data": {     "post": {       "_id": &lt;post ID&gt;, "userId": &lt;user ID&gt;, "description": &lt;string&gt;, "picturePath": &lt;string&gt;,       "likes": &lt;user ids who liked the post&gt;, "comments": &lt;array of comment objects&gt;     }   } }</pre> <p><b><u>Comment Data Object Format</u></b></p> <pre>{ _id, userId, comment }</pre> <p><b><u>Failure</u></b></p> <pre>{ "status": 409, "data": { "message": &lt;err.message&gt; } }</pre>
Get all posts  <b>GET</b>  /	<p><b><u>Response Code</u></b></p> <p><b><u>Success</u></b></p> <pre>{ "status": 200, "data": { "posts": &lt;array of post data objects&gt; } }</pre> <p><b><u>Post Data Object Model:</u></b></p> <pre>{ _id, userId, description, picturePath, likes, comments }</pre> <p><b><u>Failure</u></b></p>

	<pre>{ "status": 404, "data": { "message": &lt;err.message&gt; } }</pre>
Get posts by a single user  <b>GET</b>  /:userId/posts	<p><b><u>Response Code</u></b></p> <p><b><u>Success</u></b></p> <pre>{ "status": 200, "data": { "posts": &lt;array of user's post data objects&gt; } }</pre> <p><u>Post Data Object Model:</u></p> <pre>{ _id, userId, description, picturePath, likes, comments }</pre> <p><b><u>Failure</u></b></p> <pre>{ "status": 404, "data": { "message": &lt;err.message&gt; } }</pre>
Like/Dislike a post  <b>PATCH</b>  /:id/like	<p><b><u>Request Parameter</u></b></p> <pre>{   "headers": { "Authorization": `Bearer \${token}`, "Content-Type": "application/json" }   "data": { "userId": &lt;user ID&gt; } }</pre> <p><b><u>Response Code</u></b></p> <p><b><u>Success</u></b></p> <pre>{ "status": 200,   "data": {     "post": {       "_id": &lt;post ID&gt;, "userId": &lt;user ID&gt;, "description": &lt;string&gt;, "picturePath": &lt;string&gt;,       "likes": &lt;user ids who liked the post&gt;, "comments": &lt;array of comment objects&gt;     }   } }</pre> <p><b><u>Failure</u></b></p> <pre>{ "status": 404, "data": { "message": &lt;err.message&gt; } }</pre>
Comment on a post  <b>PATCH</b>  /:id/comment	<p><b><u>Request Parameter</u></b></p> <pre>{   "headers": { "Authorization": `Bearer \${token}`, "Content-Type": "application/json" }   "data": { "userId": &lt;user ID&gt;, "comment": &lt;user comment&gt; } }</pre>

	<p><b><u>Response Code</u></b></p> <p><b><u>Success</u></b></p> <pre>{ "status": 200,   "data": {     "post": {       "_id": &lt;post ID&gt;, "userId": &lt;user ID&gt;, "description": &lt;string&gt;, "picturePath": &lt;string&gt;,       "likes": &lt;user ids who liked the post&gt;, "comments": &lt;array of comment objects&gt;     }   } }</pre> <p><b><u>Failure</u></b></p> <pre>{ "status": 404, "data": { "message": &lt;err.message&gt; } }</pre>
Delete a post  <b>DELETE</b>  /:id/delete	<p><b><u>Request Parameter</u></b></p> <pre>{ "headers": { "Authorization": `Bearer \${token}`, "Content-Type": "application/json" } }</pre> <p><b><u>Response Code</u></b></p> <p><b><u>Success</u></b></p> <pre>{ "status": 202,   "data": {     "deletedPost": {       "_id": &lt;post ID&gt;, "userId": &lt;user ID&gt;, "description": &lt;string&gt;, "picturePath": &lt;string&gt;,       "likes": &lt;user ids who liked the post&gt;, "comments": &lt;array of comment objects&gt;     }   } }</pre> <p><b><u>Failure</u></b></p> <pre>{ "status": 404, "data": { "message": &lt;err.message&gt; } }</pre>



ADVERTISEMENTS ROUTES (/advertisements)	
Resource Operation HTTP Method URI (HTTP)	Request Parameter or Data Response Code
Create an advert  <b>POSTS</b>  /	<u><b>Request Parameter</b></u> <pre>{ "data": {   "name": &lt;string&gt;, "website": &lt;string&gt;, "description": &lt;string&gt;, "serverPath": "/advertisements",   "picturePath": &lt;string&gt;, "picture": &lt;image&gt; }}</pre> <u><b>Response Code</b></u> <u><b>Success</b></u> <pre>{ "status": 201 }</pre> <u><b>Failure</b></u> <pre>{ "status": 409, "data": { "message": &lt;err.message&gt; } }</pre>
Get all advertisements  <b>GET</b>  /	<u><b>Request Parameter</b></u> <b>NONE</b>  <u><b>Response Code</b></u> <u><b>Success</b></u> <pre>{ "status": 200, "data": { "ads": &lt;array of advertisement data objects&gt; } }</pre> <u>Advert Data Object Model:</u> <pre>{ name, website, picturePath, description }</pre> <u><b>Failure</b></u> <pre>{ "status": 404, "data": { "message": &lt;err.message&gt; } }</pre>