

**GREEN does not require authorization token in header**

Service	Endpoints	Description	Request	Response
Predict	POST /predict	Get bounding boxes	Body: <u>multipart/form-data</u> "width": <number> "image": <file: image/jpeg>	<pre>{   "boxes": [     {       "x": &lt;number&gt;,       "y": &lt;number&gt;,       "w": &lt;number&gt;,       "h": &lt;number&gt;,       "confidence": &lt;number&gt;,       "class": "hold"   "volume"     },     ....   ],   "width": &lt;number&gt;,   "height": &lt;number&gt; }</pre>
User	POST /user/signup	Sign ups and send verification email	Body: <u>application/json</u> <pre>{   "name": &lt;str&gt;,   "email": &lt;str&gt;,   "password": &lt;str&gt; }</pre>	<pre>{   "Message": "Sign up success",   "Destination": "y***@g***.com",   "DeliveryMedium": "EMAIL",   "AttributeName": "email" }</pre>
	POST /user/confirm	Confirms sign up with verification	Body: <u>application/json</u> <pre>{   "name": &lt;str&gt;,   "code" &lt;str&gt; }</pre>	<pre>{   "Message": "Confirmation success" }</pre>
	POST /user/login	Returns access token	Body: <u>application/json</u> <pre>{   "email": &lt;str&gt;,   "password": &lt;str&gt; }</pre>	<pre>{   "Message": "Sign in success",   "AccessToken": &lt;str&gt;,   "ExpiresIn": &lt;int:seconds&gt;,   "TokenType": "Bearer",   "RefreshToken": &lt;str&gt;,   "IdToken": &lt;str&gt;, }</pre>
	POST /user/logout	Invalidates access token	<b>Bearer Authorization. IE: Ensure header contains</b>  Bearer <str:accessToken>	<pre>{   "Message": "Sign out success" }</pre>
Route	POST /route/new	Create new route by saving to S3 bucket  Only allow if the gym is valid	<b>Bearer Authorization. IE: Ensure header contains</b>  Bearer <str:accessToken>  Body: <u>multipart/form-data</u> "countryCode": <str> "expiredTime": <str: ISOFormat> "routeName": <str> "gymLocation": <str: LatLong> "ownerGrade": <number> "routePhoto": <file: JPG, 5MB>	<pre>{   "Message": "Create route success",   "Item": {     "username": &lt;str:routeowner&gt;,     "createdAt": &lt;str&gt;,     "expiredTime": &lt;str&gt;,     "routeName": &lt;str&gt;,     "gymLocation": &lt;str&gt;,     "routeURL": &lt;str: url&gt;,     "ownerGrade": &lt;number&gt;,     "publicGrade": &lt;number&gt;,     "publicGradeSubmissions": [       {         "userEmail": &lt;number&gt;       },       ...     ],     "voteCount": &lt;number&gt;,     "upVotes": [],     "reports": [],     "commentCount": 0,     "comments": []   } }</pre>

POST /route/details	Get photo, votes, grades, comments of one route  (Returns slightly different data depending on if authorization header is provided)	Body: <u>application/json</u> { "username": <str:routeowner>, "createdAt": <str> } # Acts as route identifier  <b>Optional</b>  <b>Bearer Authorization. IE: Ensure header contains</b>  Bearer <str:accessToken>  Including this will check if the user has voted, graded, reported the route. The default values are false.	{ "Message": "Get route details success", "Item": { "username": <str:routeowner>, "createdAt": <str>, "expiredTime": <str>, "routeName": <str>, "gymLocation": <str>, "routeURL": <str>, "ownerGrade": <number>, "publicGrade": <number>, "voteCount": <number>, "comments": [], "hasVoted": <boolean>, "hasReported": <boolean>, "hasGraded": <boolean>, "graded": <number> } }
POST /route/details/vote	Upvote route	<b>Bearer Authorization. IE: Ensure header contains</b>  Bearer <str:accessToken>  Body: <u>application/json</u> { "username": <str:routeowner>, "createdAt": <str> }	{ "Message": "Upvote route success" }
POST /route/details/grade	Assign grade to route  (Handles differently for owner and public in backend)	<b>Bearer Authorization. IE: Ensure header contains</b>  Bearer <str:accessToken>  Body: <u>application/json</u> { "username": <str:routeowner>, "createdAt": <str>, "grade": <number> }	{ "Message": "Grade route success", "Item": { "publicGrade": <number>, "ownerGrade": <number> } }
POST /route/details/comment	Add a new comment	<b>Bearer Authorization. IE: Ensure header contains</b>  Bearer <str:accessToken>  Body: <u>application/json</u> { "username": <str:routeowner>, "createdAt": <str>, "comment": <str: not more than 150 chars> }	{ "Message": "Comment route success", "Item": { "username": <str>, "timestamp": <number: unix>, "comment": <str> } }
DELETE /route/details/comment	Delete the comment if you are poster or route owner	<b>Bearer Authorization. IE: Ensure header contains</b>  Bearer <str:accessToken>  Body: <u>application/json</u> { "username": <str:routeowner>, "createdAt": <str>, "timestamp": <number: unix> }	{ "Message": "Delete comment success" }
POST /route/details/report	Report route	<b>Bearer Authorization. IE: Ensure header contains</b>  Bearer <str:accessToken>	{ "Message": "Report route success" }

			Body: <u>application/json</u> { "username": <str:routeowner>, "createdAt": <str> }	
GET /route/all	Get routes by gyms  Note: Frontend call another API to determine proximity	Url parameter of "gymLocation"	{ "Message": "Query routes by gym success", "Items": [ { "routeName": <str>, "publicGrade": <number>, "routeURL": <str:url>, "commentCount": 0, "username": <str>, "gymLocation": <str>, "createdAt": <str>, "voteCount": <number> } ] }	
GET /route/gym/all	Get gyms	If no parameter, returns all the gyms  <u>Or</u>  If url parameter of "countryCode" exists, returns the gyms in the countryCode (If there are 100+ gyms this would be preferred)	{ "Message": "Scan all gyms success", "Items": [ { "countryCode": "Singapore", "gymLocation": <str>, "gymName": <str> } ] }	
DELETE /route	Delete a particular route if you are route owner	<b>Bearer Authorization. IE: Ensure header contains</b>  Bearer <str:accessToken>  Body: <u>application/json</u> { "createdAt": <str: ISOString> }	{ "Message": "Delete route success" }	

#### Database supported features

- Get all gyms and their locations
- Search routes by gym
- Add route by gym
- Upvote
- Report
- Upgrade / Downgrade
- View Owner Grade & Public Grade
- View vote count
- View route photo
- Search routes by a single username
- TTL removal of outdated routes
- ADMIN: Add gym
- ADMIN: Delete route
- ADMIN: Delete gym

Database	Fields	Index
Route	username ( <b>PK</b> ) <cognito jwt token username>	Global Secondary Index gymLocation ( <b>PK</b> )

	<p>createdAt <b>(SK)</b>  yyyy-mm-ddThh:mm:ssZ  ttl  &lt;time to live datetime&gt;  routeName  &lt;str&gt;  gymLocation  locational_string  routeURL  s3bucketlink -&gt; /&lt;emailHash&gt;/&lt;createdAt&gt;/  ownerGrade  &lt;integer&gt;  publicGrade (Includes ownerGrade)  &lt;integer&gt;  publicGradeSubmissions  [{ email: &lt;str&gt;, grade:&lt;integer&gt; }, { }, ...]  voteCount  &lt;integer&gt;  upVotes  [list of emails]  reports  [list of emails]  commentCount  &lt;integer&gt;  comments  [{ username: &lt;integer&gt;, comment: &lt;str&gt;, timestamp:  &lt;number&gt; }, { }, ...]</p>	<p>createdAt <b>(SK)</b>  routeName (projected)  publicGrade (projected)  username (projected)  voteCount (projected)  commentCount (projected)  routeURL (projected)</p>
Gym	<p>countryCode (PK)  &lt;str&gt; (Ensure only alphanumeric and space)  gymLocation (SK)  &lt;str:latLong&gt; (Google Maps right click)  gymName  &lt;str&gt;</p>	