**API Backend Documentation**

1. **User Registration**

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| Get Best Routes | *Retrieves the best available routes for local transit between specified start and end points* |
| HTTP Method | GET |
| URL | [https://yourapi.com/routes?start={start\_location}&end={end\_location](https://yourapi.com/routes?start=%7bstart_location%7d&end=%7bend_location)} |
| Description | Returns available transit routes between two points. |
| Request Headers | Authorization: Bearer <token>  Content-Type: application/json |
| Request Parameters | None |
| Request Body | start (String) – User's starting location  end (String) – User's destination |
| Response Example | json { "status": "success", "message": "User registered successfully" } |
| Response Codes | 201 Created – User registered successfully  400 Bad Request – Invalid input data |

1. **User Login**

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| User Login | *Allows users to authenticate and receive a JWT token* |
| HTTP Method | POST |
| URL | <https://yourapi.com/auth/login> |
| Description | Authenticates users and returns a JWT token for subsequent requests. |
| Request Headers | Content-Type: application/json |
| Request Parameters | None |
| Request Body | json { "email": "[user@example.com](mailto:user@example.com)", "password": "password123" } |
| Response Example | json { "status": "success", "token": "your\_jwt\_token" } |
| Response Codes | 200 OK – Successful login   1. authorized – Invalid credentials |

1. **Get Best Routes**

|  |  |
| --- | --- |
| Get Best Routes | *Retrieves the best available routes for local transit between specified start and end points* |
| HTTP Method | GET |
| URL | [https://yourapi.com/routes?start={start\_location}&end={end\_location](https://yourapi.com/routes?start=%7bstart_location%7d&end=%7bend_location)} |
| Description | Returns available transit routes between two points. |
| Request Headers | Authorization: Bearer <token>  Content-Type: application/json |
| Request Parameters | start (String) – User's starting location  end (String) – User's destination |
| Request Body | None |
| Response Example | json { "status": "success", "routes": [ { "mode": "bus", "route\_number": "23B", "estimated\_time": "30 mins", "fare": "₱15" }, { "mode": "jeepney", "route\_number": "T123", "estimated\_time": "45 mins", "fare": "₱10" } ] } |
| Response Codes | 200 OK – Routes retrieved successfully  400 Bad Request – Missing parameters  401 Unauthorized – Authentication required |

1. **Get Routes from Current Location**

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| Get Routes from Current Location | *Provides transit routes from the user's current location to the specified destination* |
| HTTP Method | GET |
| URL | [https://yourapi.com/routes/current?end={end\_location](https://yourapi.com/routes/current?end=%7bend_location)} |
| Description | Returns transit routes based on the user's current location (provided by the client). |
| Request Headers | Authorization: Bearer <token>  Content-Type: application/json |
| Request Parameters | end (String) – Destination location |
| Request Body | None |
| Response Example | json { "status": "success", "routes": [ { "mode": "minibus", "route\_number": "M11", "estimated\_time": "20 mins", "fare": "₱12" } ] } |
| Response Codes | 200 OK – Routes retrieved successfully  400 Bad Request – Missing parameters  401 Unauthorized – Authentication required |

1. **Get Estimated Fare and Time**

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| --- | --- |
| Get Estimated Fare and Time | *Provides an estimated travel time and fare for a given transit route* |
| HTTP Method | GET |
| URL | [https://yourapi.com/estimate?start={start\_location}&end={end\_location](https://yourapi.com/estimate?start=%7bstart_location%7d&end=%7bend_location)} |
| Description | Returns an estimate of travel time and fare between two points. |
| Request Headers | Authorization: Bearer <token>  Content-Type: application/json |
| Request Parameters | start (String) – Starting location  end (String) – Destination location |
| Request Body | None |
| Response Example | json { "status": "success", "estimated\_time": "40 mins", "fare": "₱20" } |
| Response Codes | 200 OK – Estimate retrieved successfully  400 Bad Request – Missing parameters  401 Unauthorized – Authentication required |

1. **Get Nearby Stops**

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| Get Nearby Stops | *Returns a list of nearby transit stops based on the user's location* |
| HTTP Method | GET |
| URL | [https://yourapi.com/stops/nearby?lat={latitude}&lng={longitude](https://yourapi.com/stops/nearby?lat=%7blatitude%7d&lng=%7blongitude)} |
| Description | Retrieves transit stops near the provided latitude and longitude. |
| Request Headers | Authorization: Bearer <token>  Content-Type: application/json |
| Request Parameters | lat (Float) – Latitude of the user's location  lng (Float) – Longitude of the user's location |
| Request Body | None |
| Response Example | json { "status": "success", "stops": [ { "stop\_name": "Ayala Bus Terminal", "distance": "200m" }, { "stop\_name": "Makati Jeepney Station", "distance": "350m" } ] } |
| Response Codes | 200 OK – Stops retrieved successfully  400 Bad Request – Missing parameters  401 Unauthorized – Authentication required |

1. **Get Real-Time Updates**

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| --- | --- |
| Get Real-Time Updates | *Retrieves real-time updates for a specific transit route* |
| HTTP Method | GET |
| URL | [https://yourapi.com/routes/{route\_id}/updates](https://yourapi.com/routes/%7broute_id%7d/updates) |
| Description | Returns real-time information (e.g., delays, current location, next stop) for a specific transit route. |
| Request Headers | Authorization: Bearer <token>  Content-Type: application/json |
| Request Parameters | route\_id (String) – Unique identifier for the transit route |
| Request Body | None |
| Response Example | json { "status": "success", "updates": { "delay": "5 mins", "current\_location": "Buendia Station", "next\_stop": "Ayala Terminal" } } |
| Response Codes | 200 OK – Updates retrieved successfully  400 Bad Request – Invalid route ID  401 Unauthorized – Authentication required |

1. **Save Favorite Route**

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| Save Favorite Route | *Saves a frequently used route for quick access* |
| HTTP Method | POST |
| URL | <https://yourapi.com/user/favorites> |
| Description | Allows users to save a transit route as a favorite. |
| Request Headers | Authorization: Bearer <token>  Content-Type: application/json |
| Request Parameters | None |
| Request Body | json { "route\_id": "23B", "start": "Makati", "end": "Quezon City" } |
| Response Example | json { "status": "success", "message": "Route saved successfully" } |
| Response Codes | 200 OK – Route saved successfully  400 Bad Request – Missing parameters  401 Unauthorized – Authentication required |

1. **Get User's Favorite Routes**

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| --- | --- |
| Get User's Favorite Routes | *Retrieves the user's saved favorite transit routes* |
| HTTP Method | GET |
| URL | <https://yourapi.com/user/favorites> |
| Description | Fetches all favorite routes saved by the user. |
| Request Headers | Authorization: Bearer <token>  Content-Type: application/json |
| Request Parameters | None |
| Request Body | None |
| Response Example | json { "status": "success", "favorites": [ { "route\_id": "23B", "start": "Makati", "end": "Quezon City" } ] } |
| Response Codes | 200 OK – Favorites retrieved successfully  401 Unauthorized – Authentication required |

1. **Submit Feedback**

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| --- | --- |
| Submit Feedback | *Allows users to submit feedback regarding their transit experience* |
| HTTP Method | POST |
| URL | <https://yourapi.com/feedback> |
| Description | Receives user feedback including ratings and comments about their transit experience. |
| Request Headers | Authorization: Bearer <token>  Content-Type: application/json |
| Request Parameters | None |
| Request Body | json { "route\_id": "23B", "rating": 4, "comments": "The bus was clean and arrived on time." } |
| Response Example | json { "status": "success", "message": "Feedback submitted successfully" } |
| Response Codes | 200 OK – Feedback submitted successfully  400 Bad Request – Missing parameters  401 Unauthorized – Authentication required |

1. **Update User Profile**

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| Update User Profile | *Allows users to update their profile information* |
| HTTP Method | PUT |
| URL | <https://yourapi.com/auth/profile> |
| Description | Enables users to update profile details such as username, email, or profile picture. |
| Request Headers | Authorization: Bearer <token>  Content-Type: application/json |
| Request Parameters | None |
| Request Body | json { "username": "updatedUsername", "email": "[updated@example.com](mailto:updated@example.com)" } |
| Response Example | json { "status": "success", "message": "Profile updated successfully" } |
| Response Codes | 200 OK – Profile updated successfully  400 Bad Request – Invalid input data  401 Unauthorized – Authentication required |

1. **Password Reset**

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| --- | --- |
| Password Reset | *Allows users to reset their password using a recovery process* |
| HTTP Method | POST |
| URL | <https://yourapi.com/auth/reset-password> |
| Description | Initiates a password reset process, typically by sending a reset link to the user's email. |
| Request Headers | Content-Type: application/json |
| Request Parameters | None |
| Request Body | json { "email": "[user@example.com](mailto:user@example.com)" } |
| Response Example | json { "status": "success", "message": "Password reset link sent" } |
| Response Codes | 200 OK – Reset link sent successfully  400 Bad Request – Email not found |

1. **User Logout**

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| --- | --- |
| User Logout | *Logs out the user by invalidating the current JWT token* |
| HTTP Method | POST |
| URL | <https://yourapi.com/auth/logout> |
| Description | Logs out the user and invalidates their JWT token. |
| Request Headers | Authorization: Bearer <token>  Content-Type: application/json |
| Request Parameters | None |
| Request Body | None |
| Response Example | json { "status": "success", "message": "Logged out successfully" } |
| Response Codes | 200 OK – Logout successful  401 Unauthorized – Token invalid or expired |