CS 496 Final Project Cloud Only

Matthew Lay

Base url - https://mobile-and-cloud-final-project.appspot.com

The API allows for users to manipulate Trips and Activities.   A trip can have multiple activities. Each activity has one and only one trip. The user can create, modify, delete, and view trips and activities. Activities are added to trips at activity creation.

A Trip is made of

- name - string
- destination - string
- start_date -date
- end_date - date
- purpose - string
- id - string, set by API
- user_id – string, unique id from Users API of logged in user

An Activity is made of

- name - string
- date - date
- start_time - time
- end_time - time
- trip – id of the trip that this activity belongs to
- id – string, set by API
- user_id – string, unique id from Users API of logged in user

A user must be signed in to access any aspect of the API due to the potentially private nature of trips and activities. On attempting to use any API endpoint without being logged in, the user will be prompted to log in with a Google account, which is the only accepted account format. Once logged in the user can access and create his data.

The account access is handled by the Google Users API. This API allows you to easily implement accounts into your website as long as you're ok with users being required to have Google accounts. A user logs in with an email and password and the account has a unique user_id. The user_id is persistant even if the user changes emails, so it can be stored in the database to identify an entity as belonging to that particular user. The API also handles redirecting the user to the login page and back to your site. You can implement over the entire site or over various pages. Once a user is logged in, a cookie is stored in the user's browser. This cookie must be sent to the site with every request, similar to an OAuth token.

Routes

- GET /trips
  - Return a list of up to 30 trips that the user is authorized to see (that is, all of his own trips). List is JSON formatted.

- POST /trips
  - Creates a new trip. The user must supply name, destination, and start_date in JSON format in body. The date must be submitted in MM/DD/YYYY format. The user may also include purpose and end_date. The id and user_id are set by the API.
  - Returns the created entity as a JSON string and stores the entity in the database

- GET /trips/{id}
  - Returns the trip specified by the id as a JSON string. User must be authorized to access the trip.

- DELETE /trips/{id}
  - Deletes the trip specified by the id and all activities in the trip. User must be authorized.

- PATCH /trips/{id}
  - Modifies the trip specified by the id. User must supply JSON data in the request body. Can modify name, destination, purpose, start_date, end_date. User must be authorized.

- POST /trips/{id}/activities
  - Creates a new activity for this trip if the user is authorized to access the trip. The activity is stored in the database and returned as a JSON string in the response. User must supply name and may also supply date, start_time, and end_time as JSON data in the request body. Dates must be in MM/DD/YYYY format and time must be in HH:MMAM or HH:MMPM format. The id and user_id are set by the API. The trip property is set to the id of the trip the activity belongs to by the API.

- GET /trip/{id}/activities
  - Returns a list of up to 30 activities in this trip if the user is authorized. Data is JSON string.

- GET /activities/{id}
  - Returns the specified activity as a JSON string if the user is authorized

- DELETE /activities/{id}
  - Deletes the specified activity if the user is authorized

- PATCH /activities/{id}
  - Modifies the activity specified by the id if the user is authorized. User must supply JSON data in request body. Can modify name, date, start_time, and end_time. Dates must be in MM/DD/YYYY format and time must be in HH:MMAM or HH:MMPM format.