

# ManageLocationFunction for "Where To?"

This document details the ManageLocationFunction Lambda function for the "Where To?" application. This function is used to manage locations (cities) within a user group: it creates new locations, edits existing locations, and deletes locations.

*Keep in mind, nothing is set in stone, this is just potential at the moment*

## Function Summary

The `ManageLocationFunction` is responsible for three main actions:

1. Adding a new city (location) to a user group in the UserGroups table in DynamoDB.
2. Editing an existing city's details.
3. Deleting a city from a user group.

The action to be performed is determined by an action parameter included in the request.

## Expected Inputs

The function expects a JSON object with the following structure:

```
{  
  "action": "addCity" | "editCity" | "deleteCity",  
  "userId": "<userId>",  
  "groupName": "<groupName>",
```

```
"cityName": "<cityName>",  
}
```

- `action` : A string that indicates the action to be performed. It should be one of "addCity", "editCity", or "deleteCity".
- `userId` : The ID of the user who is performing the action.
- `groupName` : The name of the group where the city is to be added, edited, or deleted.
- `cityName` : The name of the city to be added, edited, or deleted.

Note: If the action is "editCity", additional parameters related to the city details that are to be edited could be included in the request.

## Expected Outputs

The function will return a JSON object with the following structure:

```
{  
  "statusCode": 200,  
  "body": "<Response Message>"  
}
```

- `statusCode` : A status code that indicates the result of the function's execution. A 200 code means the operation was successful.
- `body` : A string containing a message about the result of the function's execution.

## Permissions

The `ManageLocationFunction` Lambda function needs permissions to read and write to the `UserGroups` table in DynamoDB. The required permissions can be included in an IAM role attached to the Lambda function. This role should include the `dynamodb:GetItem`, `dynamodb:PutItem`,

`dynamodb:UpdateItem`, and `dynamodb>DeleteItem` permissions for the `UserGroups` table.

## Example

An example input to the `ManageLocationFunction` might look like this:

```
{
  "action": "addCity",
  "userId": "user1",
  "groupName": "group1",
  "cityName": "City2",
}
```

This request would add a new city "City2" to the group "group1".

An example output might look like this:

```
{
  "statusCode": 200,
  "body": "City 'City2' successfully added to group 'group1'."
}
```

This response indicates that the operation was successful.