CampusCompass

Team Members:

• Kavitha Siralta
• Nikunj Dineshbhai Avaiya
• Sanket Dobaria
• Priyank Thakur

All Date and time stored in Database will be Eastern Standard Time (EST) Zone

Users:

The Users collection will store all users. Users will be able to login update their details and registered Subjects/Events. Users will role "Admin" will be able to edit Events/Class Details:

```
{
  "_id": {"$oid": "64236d854eebf566c9d8d8da"},
  "Role": ["Admin","Student"],
  "email": "admin1@stevens.edu",
  "name": "Administrator",
  "department": "Administrator",
  "hashedPassword": "$2a$08$XdvNkfdNIL8F8xsuIUeSbNOFgK0M0iV5HOskfVn7.PWncShU.O",
  "events": ["64236f804eebf566c9d9d8de"],
  "lastupdatedDate": {"$date": "2023-03-28T18:54:40.000Z"}
}
```

Name	Type	Description
_id	String	Unique Identifier for the class/event
Role	Array	Role assigned to User (Student/Admin/Professor)
email	String	Email id of User (Must contain @stevens.edu as domain)
Name	String	Name of User
hashedPassword	String	Hashed Password
Events	Array	EventID of all user is registered
lastupdatedDate	Date	Date when User record was inserted in Database

Locations:

Locations collection will store all details of Buildings present on campus. Administrators will be able to add/remove/edit this details.

```
{
  "_id": {"$oid": "64236f804eebf566c9d8d8de"},
  "name": "Howe Center",
  "desc": "The Howe Center is situated at the top of the hill on Castle Point where the ancestral home of
the Stevens family – Castle Stevens – once stood. Built in 1784 by Colonel John Stevens the Georgian-style
mansion served, at times, as a dormitory, a cafeteria and office space.",
  "type": ["administrative"],
  "operating_hours": ["08:00:00","23:00:00"],
  "rooms": [
    {
      "_id": {$oid": "64236f804eebf566c9d8d8df"},
      "room_number": 901,
      "capacity": 23,
      "floor_number": 9,
      "type": "admin"
    }
  ],
  "location": {
    "type": "Polygon",
    "coordinates": [
      [
        [-74.02406347350265,40.74507529485015],
```

```
          [-74.02410420475356, 40.74494456827472],
          [-74.02401346813976, 40.7449278345095],
          [-74.02411364675287, 40.744645743728256],
          [-74.02372204662885, 40.744579260608276],
          [-74.02364398707213, 40.7448639079806],
          [-74.02372401080272, 40.74487927842213],
          [-74.02367780014342, 40.74500480329371],
          [-74.02378577842126,40.74502736098907],
          [-74.02377563456794,40.745052124415196],
          [-74.0239502139303,40.74508353526852],
          [-74.02396534673319,40.745058097451846],
          [-74.02406347350265,40.74507529485015]
        ]
      ]
   },
   "entrances": [
     {
       "location": {
         "coordinates": [-74.02407940709723,40.745025667321755],
         "type": "Point"},
       "accessible": "Y"
     },
     {
       "location": {
         "coordinates": [-74.0239075398253,40.74459849354045],
         "type": "Point"},
       "accessible": "N"
     }
   ],
   "lastupdatedDate": {"$date": "2023-03-28T18:54:40.000Z"}
}
```

Name	Type	Description
_id	String	Unique Identifier for the building
Name	String	Name of building
Desc	String	Description of building
Type	Array	Type of building (Residence, Academic, Administrative, Parking)
Operating_hours	Array	[Start_time (hh:mm:ss), End_time (hh:mm:ss)] Time will be String 24 hours format
Room	Sub-Document	Sub-documents of Room Details _id: Unique Identifier for the room Room_number: Number of Room in Building Capacity: Capacity of Room Floor_number: Floor number where building is located. Type: Type of Room <table><tr><th>Name</th><th>Type</th><th>Description</th></tr><tr><td>_id</td><td>String</td><td>Unique Identifier for room</td></tr><tr><td>Room_number</td><td>Number</td><td>Number of Room in building</td></tr><tr><td>Capacity</td><td>Number</td><td>Capacity of Room</td></tr><tr><td>Floor_number</td><td>Number</td><td>Floor Number where building is located</td></tr><tr><td>Type</td><td>String</td><td>Type of Room (classroom, admin, laboratory)</td></tr></table>
Location	Object	GeoJSON Object containing co-ordinates of Building Type of object must be polygon as area of building must be highlighted
Entrances	Sub-Document	Sub-Documents of all entrance Points located within Area <table><tr><th>Name</th><th>Type</th><th>Description</th></tr><tr><td>Location</td><td>Object</td><td>Geojson Object Type of this will be Point</td></tr><tr><td>Accessible</td><td>String</td><td>Flag indicating whether entrance is accessible or not (Y/N)</td></tr></table>
lastupdatedDate	Date	Date when User record was inserted in Database

Department:

Department Collection will contain details of all department offices present on Campus. Room_Location field of department will point to room_id from Locations table

```
{
  "_id": {
    "$oid": "642384e34eebf566c9d8d8e1"
  },
  "name": "International Student and Scholar Services (ISSS)",
  "room_id": ["64236f804eebf566c9d8d8df"],
  "desc": "The International Student and Scholar Services (ISSS) office is committed to assisting international students, faculty and scholars in accomplishing their academic, personal and professional objectives through advising, providing immigration services, promoting cross-cultural opportunities and offering specific programs and services to our international population.",
  "lastupdatedDate": {$date: "2023-03-28T18:54:40.000Z"}
}
```

Name	Type	Description
_id	String	Unique Identifier for the class/event
Name	String	Name of User
Room_id	Array	Array of all Room_id for Rooms within department
Desc	String	Description of Offices
lastupdatedDate	Date	Date when record was inserted in Database

Events:

Events collection will contain details for all events and classes hosted on Campus.

```
{
"_id": {"$oid": "64236f804eebf566c9d9d8de"}
  "name": "CS-546-A: Web Programming I",
  "desc": "Web Programming Section A",
  "type": "class",
  "event_date": ["2023-01-23","2023-04-24","1"],
  "hours": ["18:30:00","21:00:00"],
  "created_by": "64236d854eebf566c9d8d8da",
  "location_id": ["6423a1a04eebf566c9d8d8ec","64236f804eebf566c9d9d8de"],
  "lastupdatedDate": {"$date": "2023-03-28T18:54:40.000Z"}
}
```

Name	Type	Description
_id	String	Unique Identifier for the class/event
Name	String	Name of Event/Class
Desc	String	Description of Event/Class
Type	String	Type of Event (Event/Class)
Event_date	Array	Array which will contain data in following format [Start_Date (string), End_date (string), Repeating_day_index (number)] For Day_offset below will be values: 0- One time event 1- Monday 2- Tuesday 3- Wednesday 4- Thursday 5- Friday 6- Saturday 7- Sunday
Hours	Array	Will contain data as follows: [Start_time (string), End_time (string)]
Created_By	String	User ID who created the event (Only Admins)
Location_id	Array	[Building_id (string), Room_id (string)] This Array can only be one element if Event is not in Particular Room
lastupdatedDate	Date	Date when User record was inserted in Database

Feedback:

Feedback collection will contain details for Issues Reported by user. This will be dynamic collection and will be populated if user reports any issue.

```
{
"_id": {"$oid": "64236f804eebf566c9d9d8de"}
 "reportedby": "64236d854eebf566c9d8d8da ",
 "reported_object": "64236f804eebf566c9d9d8de ",
 "desc": "This Event doesnot Exists",
"lastupdatedDate": {"$date": "2023-03-28T18:54:40.000Z"}
}
```

Name	Type	Description
_id	String	Unique Identifier for feedback
Reportedby	String	Id of User who reported the issue
Reported_object	String	ObjectID for which issue has been reported
Desc	String	Description of Issue
lastupdatedDate	Date	Date when User record was inserted in Database