EVENT API

Create event

- Method: POST
- Endpoint: /api/events/
- Request Body:

```
{
 "title": "<string, required>",
 "recurrence": "<string, required>",       // e.g., "WEEKLY" or "NONE"
 "start_time_frame": "<YYYY-MM-DD>",   // start of recurrence period
 "end_time_frame": "<YYYY-MM-DD>",     // end of recurrence period

 "timespan": [
   {
     "day_of_week": "<string, required>",  // use 3-letter day, e.g., "MON", "TUE"
     "start_time": "<HH:MM, required>",    // 24-hour time
     "end_time": "<HH:MM, required>"
   }
   // add more timespans as needed
 ],
 "category": [<int>, ...]              // optional; list of category IDs to tag event
}
```

- Success Response:

```
{
 “id: 1,
 "title": "CS Lecture",
 "recurrence": "WEEKLY",
 "start_time_frame": "2025-09-01",
 "end_time_frame": "2025-12-15",
 "timespan": [
   {
     "day_of_week": "MON",
     "start_time": "10:00",
     "end_time": "11:15"
   },
   {
     "day_of_week": "WED",
     "start_time": "10:00",
     "end_time": "11:15"
   }
 ],
 "category": [
  {
     “id”: 1,
     “category”: “Classes”
   }
 ]
```

Get event by date

- Method: GET
- Endpoint: /api/events/date/
- Request Body:

```
{"date": <Date in YYYY-MM-DD format>}
```

- Success Response:

```
{
 "events": [
   {
    "id": 1,
    "title": "CS Lecture",
    "recurrence": "WEEKLY",
    "start_time_frame": "2025-09-01",
    "end_time_frame": "2025-12-15",
    "timespan":
      {
       "day_of_week": "MON",
       "start_time": "10:00",
       "end_time": "11:15"
      },
      {
       "day_of_week": "WED",
       "start_time": "10:00",
       "end_time": "11:15"
      }
    "category": [
  {
     “id”: 1,
     “category”: “Classes”
   }
]
   },
   {
    "id": 2,
    "title": "Gym",
    "recurrence": "NONE",
    "start_time_frame": "2025-05-10",
    "end_time_frame": "2025-05-10",
    "timespan": [
      {
       "day_of_week": "MON",
       "start_time": "10:00",
       "end_time": "11:15"
      },
      {
       "day_of_week": "WED",
       "start_time": "10:00",
       "end_time": "11:15"
      }
   ],
    "category": []
   }
 ]
}
```

Get event by id

- Method: GET
- Endpoint: /api/events/<int:event_id>/
- Success Response:

```
{
 “id: 1,
 "title": "CS Lecture",
 "recurrence": "WEEKLY",
 "start_time_frame": "2025-09-01",
 "end_time_frame": "2025-12-15",
 "timespan": [
  {
    "day_of_week": "MON",
    "start_time": "10:00",
    "end_time": "11:15"
  },
  {
    "day_of_week": "WED",
    "start_time": "10:00",
    "end_time": "11:15"
  }
 ],
 "category": [1, 3]  // optional
}
```

Delete event

- Method: DELETE
- Endpoint: /api/events/<int:event_id>/
- Description: Delete an event by ID.
- Parameters: Event ID.
- Success Response:

```
{
 "title": "CS Lecture",
 "recurrence": "WEEKLY",
 "start_time_frame": "2025-09-01",
 "end_time_frame": "2025-12-15",
 "timespan": [
  {
    "day_of_week": "MON",
    "start_time": "10:00",
    "end_time": "11:15"
  },
  {
    "day_of_week": "WED",
    "start_time": "10:00",
    "end_time": "11:15"
   }
 ],
 "category": [
  {
    “id”: 1,
    “category”: “Classes”
   }
  ]
}
```

Update event

- Method: PUT
- Endpoint: /events/<int:event_id>/
- Description: Update an existing event.
- Parameters: Event ID.
- Request Body:

```
{
 "title": "<string, required>",
 "recurrence": "<string, required>",            // e.g., "WEEKLY", "NONE"
 "start_time_frame": "<YYYY-MM-DD, required>",   // e.g., "2025-09-01"
 "end_time_frame": "<YYYY-MM-DD, required>",     // e.g., "2025-12-15"
 "timespan": [
   {
    "day_of_week": "<string, required>",        // e.g., "MON"
    "start_time": "<HH:MM, required>",          // e.g., "10:00"
    "end_time": "<HH:MM, required>"             // e.g., "11:15"
   }
   // ... more timespans as needed
 ],
 "category": [<int>, ...]                      // optional, list of category IDs
}
```

- Success Response:

```
{
 “id: 1,
 "title": "CS Lecture",
 "recurrence": "WEEKLY",
 "start_time_frame": "2025-09-01",
 "end_time_frame": "2025-12-15",
 "timespan": [
   {
    "day_of_week": "MON",
    "start_time": "10:00",
    "end_time": "11:15"
   },
   {
    "day_of_week": "WED",
    "start_time": "10:00",
     "end_time": "11:15"
   }
 ],
 "category": [
  {
     “id”: 1,
     “category”: “Classes”
   }
  ]
}
```

TASK API

Create task

- Method: POST
- Endpoint: /api/task/
- Request Body:

```
{
   "description": "string",
   "date": "YYYY-MM-DD",
   "status": false
 }
```

- Successful Response:

```
{
   "id": 1,
   "description": "Complete report",
   "date": "2023-10-05",
   "status": false,
   "category": []
 }
```

Get task by date

- Method: GET
- Endpoint: /api/task/date/
- Request Body:

```
{"date": <Date in YYYY-MM-DD format>}
```

- Success Response:

```
{
   "id": 1,
   "description": "Complete report",
   "date": "2023-10-05",
   "status": false,
   "category": []
 }
```

Get task by id

- Method: GET
- Endpoint: /api/task/<int:task_id>/
- Success Response:

```
{
   "id": 1,
   "description": "Complete report",
   "date": "2023-10-05",
   "status": false,
   "category": []
 }
```

Delete task

- Method: DELETE
- Endpoint: /api/task/<int:task_id>/
- Success Response:

```
{
   "id": 1,
   "title": "Buy groceries",
   "description": "Milk, eggs, bread",
   "date": "2023-10-07",
   "status": "incomplete",
   "subtask": ["Milk", "Eggs"]
 }
}
```

Update task

- Method: PUT
- Endpoint: /api/task/<int:task_id>/
- Request Body:

```
{
   "description": "Complete report",
   "date": "2023-10-05",
   "status": false,
   "category": []
 }
```

- Successful Response:

```
{
   "description": "Updated report",
   "date": "2023-10-05",
   "status": false,
   "category": []
 }
```

CATEGORY API

List All Categories

- Method: GET
- Endpoint: /api/categories/
- Successful Response:

```
{"categories": ["Work", "Personal"]}
```

Get category information

- Method: GET
- Endpoint: /api/categories/<int:cat_id>/
- Successful Response:

```
{
   "id": 1,
   "category": "Work",
   "events": [],
   "tasks": []
 }
```

Create category

- Method: POST
- Endpoint: /api/categories/
- Request Body:

```
{"category": "Work"}
```

- Successful Response:

```
{
   "id": 1,
   "category": "Work",
   "events": [],
   "tasks": []
 }
```

Delete category

- Method: POST
- Endpoint: /api/categories/<int:cat_id>/
- Successful Response:

```
{
   "id": 1,
   "category": "Work",
   "events": [],
   "tasks": []
 }
```

Update category

- Method: POST

- Endpoint: /api/categories/<int:cat_id>/
- Successful Response:

```
{
   "id": 1,
   "category": "Work",
   "events": [],
   "tasks": []
  }
```

Add Event to Category

- Method: POST
- Endpoint: api/categories/<int:cat_id>/events/<int:event_id>/
- Successful Response:

```
{
   "id": 1,
   "category": "Work",
   "events": [],
   "tasks": []
  }
```

Remove Event from Category

- Method: DELETE
- Endpoint: api/categories/<int:cat_id>/events/<int:event_id>/
- Successful Response:

```
{
   "id": 1,
   "category": "Work",
   "events": [],
   "tasks": []
  }
```

Add Task to Category

- Method: POST
- Endpoint: api/categories/<int:cat_id>/tasks/<int:task_id>/
- Successful Response:

```
{
   "id": 1,
   "category": "Work",
   "events": [],
   "tasks": []
  }
```

Remove Task from Category

- Method: DELETE
- Endpoint: api/categories/<int:cat_id>/tasks/<int:task_id>/
- Successful Response:

```
{
   "id": 1,
   "category": "Work",
   "events": [],
   "tasks": []
  }
```

JOURNAL API

Create journal

- Method: POST
- Endpoint: /api/journals/
- Request Body:

```
{
   "title": "Day Summary",
   "date": "2023-10-05",
   "content": "Today was productive.",
   "mood": "Happy"
  }
```

- Successful Response:

```
{
   "title": "Day Summary",
   "date": "2023-10-05",
   "content": "Today was productive.",
   "mood": "Happy"
  }
```

Get journals by date

- Method: GET
- Endpoint: /api/journals/date/
- Request Body:

```
{"date": <Date in YYYY-MM-DD format>}
```

- Success Response:

```
{
    "id": 1,
    "title": "Reflection",
    "date": "2023-10-05",
    "content": "Today was productive...",
    "mood": "happy"
}...
```

Update journal by date

- Method: PUT

- Endpoint: /api/journals/date/
- Request Body:

```
{
   "date": "2023-10-05",
   "title": "Updated Title",
   "content": "New content",
   "mood": "Calm"
  }
```

- Successful Response:

```
{
   "date": "2023-10-05",
   "title": "Updated Title",
   "content": "New content",
   "mood": "Calm"
  }
```

Delete journal by date

- Method: DELETE
- Endpoint: /api/journals/date/
- Request Body:

```
{"date": <Date in YYYY-MM-DD format>}
```

- Success Response:

```
{
   "id": 1,
   "title": "Reflection",
   "date": "2023-10-05",
   "content": "Today was productive...",
   "mood": "happy"
}
```