Documentation For Appointify (P2)

Design of Models

Calendars

- **Description**: Represents a calendar, which is a collection of events, schedules, and availability information.
- **Fields**:

- `name` : The name of the calendar.

- `description` : A brief description of the calendar (optional).

- `start_date` : The start date of the calendar's effective period.

- `end_date` : The end date of the calendar's effective period.

- `created_at` : Timestamp of when the calendar was created, automatically set.

- `updated_at` : Timestamp of the last update to the calendar, automatically updated.

- `isfinalized` : A boolean flag indicating whether the calendar has been finalized and no more changes are allowed.

UserCalendars

- **Description**: Associates users with calendars, indicating ownership or participation. Supports many-to-many relationships between `User` and `Calendars` .
- **Fields**:

- `user` : ForeignKey to the `User` model, indicating the user associated with a calendar.

- `calendar` : ForeignKey to the `Calendars` model, indicating the calendar associated with a user.

- `non_busy_dates` : ManyToManyField linking to `NonBusyDate` , indicating the user's non-busy dates within the context of this calendar.

NonBusyDate

- **Description**: Represents a date on which a user is available or not busy.
- **Fields**:

- `date` : The specific date of availability.

- `non_busy_times` : ManyToManyField to `NonBusyTime` , indicating specific times on this date when the user is available.

NonBusyTime

- **Description**: Represents specific times on a non-busy date when a user is available.
- **Fields**:

- `time` : The specific time of availability.

- `preference` : A choice field indicating the user's preference level (high, medium, low) for scheduling during this time.

Contact

- **Description**: Represents a contact, potentially another user, that can be invited to events or for scheduling.
- **Fields**:

- `user` : ForeignKey to `User` , indicating the owner of this contact.

- `fname` : The first name of the contact.

- `lname` : The last name of the contact.

- `email` : The email address of the contact, unique across the system.

- `is_registered` : A boolean indicating whether the contact is a registered user of the system.

Event

- **Description**: Represents an event scheduled within a calendar.
- **Fields**:

- `calendar` : ForeignKey to `Calendars` , indicating the calendar this event belongs to.

- `owner` : ForeignKey to `User` , indicating the user who owns/created this event.

- `contact` : ForeignKey to `Contact` , indicating the contact associated with this event.

- `start_time` : The start time of the event.

- `end_time` : The end time of the event.

Schedule

- **Description**: Represents a specific scheduled time slot within a calendar.
- **Fields**:

- `calendar` : ForeignKey to `Calendars` , indicating the associated calendar.

- `start_time` : The start time of the schedule.

- `end_time` : The end time of the schedule.

- `owner` : ForeignKey to `User` , indicating the user who owns this schedule.

- `contact` : ForeignKey to `Contact` , indicating the contact associated with this schedule.

ScheduleGroup

- **Description**: Represents a group of schedules that are related or created together as a set.
- **Fields**:

- `schedules` : ManyToManyField to `Schedule` , including all schedules that are part of this group.

- `calendar` : ForeignKey to `Calendars` , indicating the associated calendar.

- `owner` : ForeignKey to `User` , indicating the owner of this schedule group.
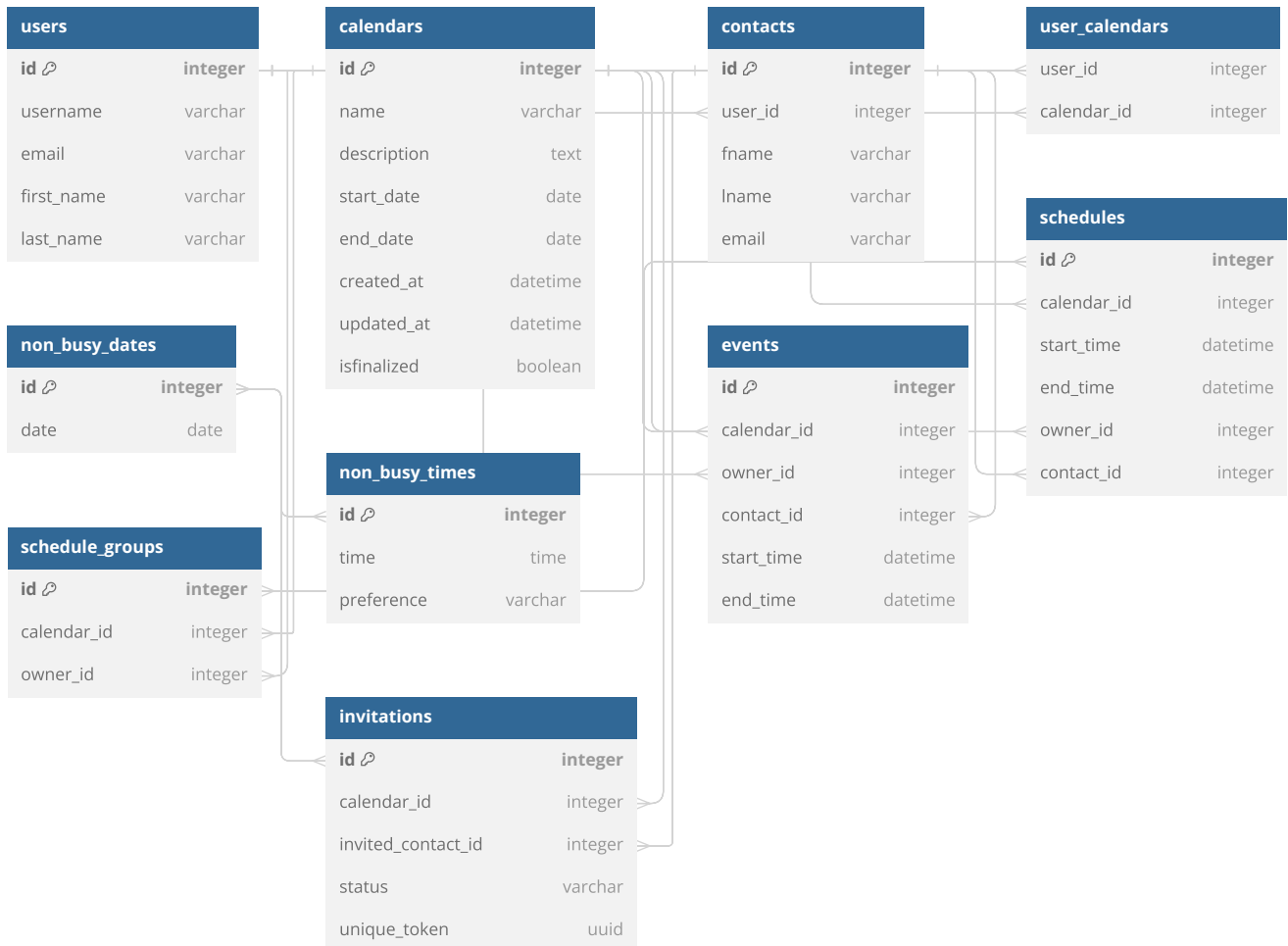
Invitation

- **Description**: Represents an invitation sent to a contact for participation in a calendar's events.

- **Fields**:

- `calendar` : ForeignKey to `Calendars` , indicating the associated calendar.

- `invited_contact` : ForeignKey to `Contact` , indicating the invited contact.

- `status` : A choice field indicating the status of the invitation (pending, declined, accepted).

- `unique_token` : A UUID field used for unique identification or verification purposes.

- `invited_contact_non_busy_dates` : ManyToManyField to `NonBusyDate` , optionally linking to dates when the invited contact is available.

ERD

users

id 🔗	integer
username	varchar
email	varchar
first_name	varchar
last_name	varchar

calendars

id 🔗	integer
name	varchar
description	text
start_date	date
end_date	date
created_at	datetime
updated_at	datetime
isfinalized	boolean

contacts

id 🔗	integer
user_id	integer
fname	varchar
lname	varchar
email	varchar

user_calendars

user_id	integer
calendar_id	integer

schedules

id 🔗	integer
calendar_id	integer
start_time	datetime
end_time	datetime
owner_id	integer
contact_id	integer

non_busy_dates

id 🔗	integer
date	date

non_busy_times

id 🔗	integer
time	time
preference	varchar

events

id 🔗	integer
calendar_id	integer
owner_id	integer
contact_id	integer
start_time	datetime
end_time	datetime

schedule_groups

id 🔗	integer
calendar_id	integer
owner_id	integer

invitations

id 🔗	integer
calendar_id	integer
invited_contact_id	integer
status	varchar
unique_token	uuid

API Endpoints

Login User

- Endpoint: auth/login
- Method: POST
- Description: Endpoint for User Authentication and Login.
- Request Parameters:

"Username" - The username of the user.

"Password" - The password of the user.

Example:

Request: auth/login

```
{

    "username": "razeen",

    "password": "razeenali"

}
```

Response:

200 OK

Signup User

- Endpoint: auth/signup
- Method: POST
- Description: Endpoint for User Registration.
- Request Parameters:

"Username" - The username of the user.

"Password" - The password of the user.

"Email" - The email of the user.

Example:

Request: auth/signup

```
{

    "username": "razeen",

    "password": "razeenali",

    "first_name": "Razeen",

    "last_name": "Ali",

    "email": "work@razeenali.com"

}
```

Response:

```
{

    "username": "razeen1"

}
```

View List of Calendars

- Endpoint: calendars/all
- Method: GET
- Description: Display list of calendars for authenticated user.

Example:

Request: GET calendars/all

Response:

```json
{

    "count": 1,

    "next": null,

    "previous": null,

    "results": [

        {

            "id": 1,

            "name": "TEST Calendar",

            "description": "THIS IS IT",

            "start_date": "2024-03-01",

            "end_date": "2024-03-31",

            "created_at": "2024-03-13T20:26:57.628330Z",

            "updated_at": "2024-03-13T20:26:57.628330Z",

            "isfinalized": false

        }

    ]

}
```

Create Calendar

- Endpoint: calendars/create/
- Method: POST
- Description: create a calendar for authenticated user.

Example:

Request: POST calendars/create/

```json
{

    "name": "TEST Calendar",

    "description": "THIS IS IT",

    "start_date": "2024-03-01",

    "end_date": "2024-03-31"

}
```

Response:

```json
{

    "id": 1,

    "name": "TEST Calendar",

    "description": "THIS IS IT",

    "start_date": "2024-03-01",

    "end_date": "2024-03-31",

    "created_at": "2024-03-13T20:26:57.628330Z",

    "updated_at": "2024-03-13T20:26:57.628330Z",

    "isfinalized": false,

    "user_calendar_id": 1

}
```

Update Calendar

- Endpoint: calendars/update/<int:pk>/
- Method: PUT
- Description: update specific calendar for authenticated user.
- URL Params: pk is the calendar id.

Example:

Request: PUT calendars/update/1/

```json
{

    "name": "Birthday Calendar",

    "description": "THIS IS IT",

    "start_date": "2024-03-01",
```

```
      "end_date": "2024-03-31"

  }
```

Response:

```
{

    "id": 1,

    "name": "Birthday Calendar",

    "description": "THIS IS IT",

    "start_date": "2024-03-01",

    "end_date": "2024-03-31",

    "created_at": "2024-03-13T20:26:57.628330Z",

    "updated_at": "2024-03-13T20:26:57.628330Z",

    "isfinalized": false,

    "user_calendar_id": 1

}
```

View All Calendars with Preferences

- Endpoint: calendars/user-calendars/
- Method: GET
- Description: view all calendars with preferences for authenticated user.

Example:

Request: GET calendars/user-calendars/

Response:

```
{

  {

      "id": 1,

      "user": 1,

      "calendar": 1,

      "non_busy_dates": [

          {

          "id": 1,

          "date": "2024-03-05",
```

```
        "non_busy_times": [

            {

            "id": 1,

            "time": "12:00:00",

            "preference": "high"

            }

        ]

        }

    ]

    }

}
```

Update User Preferences for a specific calendar (AFTER CREATION OF CALENDAR)

- Endpoint: calendars/user-calendars/<int:cid>/update/
- Method: PUT
- Description: update user preferences (nonbusy date and nonbusy time) for a specific calendar for authenticated user.
- URL Params: cid is the calendar id.

Example:

Request: PUT calendars/user-calendars/18/update/

```
{

    {

        "non_busy_dates": [

            {

            "id": 1,

            "date": "2024-03-05",

            "non_busy_times": [

                {

                "id": 1,

                "time": "12:00:00",

                "preference": "low"

                }

            ]
```

```
        }
      ]
    }
  }
```

Response:

```
{
  {
    "id": 1,
    "user": 1,
    "calendar": 1,
    "non_busy_dates": [
      {
        "id": 1,
        "date": "2024-03-05",
        "non_busy_times": [
          {
            "id": 1,
            "time": "12:00:00",
            "preference": "low"
          }
        ]
      }
    ]
  }
}
```

Delete User Calendar along with preferences

- Endpoint: calendars/user-calendars/<int:pk>/delete/
- Method: DELETE
- Description: delete specific calendar with all user preferences.
- URL Params: pk is the calendar id.

Contacts - API Endpoints

View List of Contacts

- Endpoint: `/contacts/`
- Method: GET
- Description: Display list of contacts for the authenticated user.

Example:

Request: `GET /contacts/`

Response:

```json
[
    {
        "id": 1,
        "fname": "Victor",
        "lname": "Ma",
        "email": "victor.ma@example.com"
    },
    {
        "id": 2,
        "fname": "Neha",
        "lname": "Sohail",
        "email": "neha.sohail@example.com"
    },
    {
        "id": 3,
        "fname": "Dev",
        "lname": "Singhvi",
        "email": "dev.singhvi@example.com"
    },
    {
        "id": 4,
        "fname": "Razeen",
        "lname": "Ali",
        "email": "razeen.ali@example.com"
    }
```

```
    ]
```

Create Contact

- Endpoint: `/contacts/create/`
- Method: POST
- Description: Create a new contact for the authenticated user.

Example:

Request: `POST /contacts/create/`

```json
{

    "fname": "Alice",

    "lname": "Smith",

    "email": "alice.smith@example.com"

}
```

Response:

```json
{

    "id": 5,

    "fname": "Alice",

    "lname": "Smith",

    "email": "alice.smith@example.com"

}
```

Update Contact

- Endpoint: `/contacts/update/<int:pk>/`
- Method: PUT, PATCH
- Description: Update specific contact details for the authenticated user.
- URL Params: `pk` is the contact ID.

Example:

Request: `PATCH /contacts/update/5/`

```json
{

    "lname": "Johnson"
```

```
    }
```

Response:

```
{

    "id": 5,

    "fname": "Alice",

    "lname": "Johnson",

    "email": "alice.smith@example.com"

}
```

View Single Contact

- Endpoint: `/contacts/<int:pk>/`
- Method: GET
- Description: View details of a single contact for the authenticated user.
- URL Params: `pk` is the contact ID.

Example:

Request: `GET /contacts/5/`

Response:

```
{

    "id": 5,

    "fname": "Alice",

    "lname": "Johnson",

    "email": "alice.smith@example.com"

}
```

Delete Contact

- Endpoint: `/contacts/<int:pk>/delete/`
- Method: DELETE
- Description: Delete a specific contact.
- URL Params: `pk` is the contact ID.

Example:

Request: `DELETE /contacts/5/delete/`

Response:

```
{

    "message": "Contact deleted successfully."

}
```

Events

Get All Info for a Calendar

- Endpoint: events/availability_data?calendar_id=pk
- Method: GET
- Description: Invite a user to a specific calendar.
- URL Params: `pk` is the calendar ID.
- Response:

```
[

    {

        "user_id": "razeen",

        "user_non_busy_dates": [

            {

                "id": 1,

                "non_busy_times": [

                    {

                        "id": 1,

                        "time": "18:00:00",

                        "preference": "low"

                    },

                    {

                        "id": 2,

                        "time": "16:00:00",

                        "preference": "high"

                    },

                    {

                        "id": 3,

                        "time": "16:00:00",

                        "preference": "low"

                    },
```

```json
            {
                "id": 4,
                "time": "18:00:00",
                "preference": "high"
            }
        ],
        "date": "2025-05-05"
    },
    {
        "id": 2,
        "non_busy_times": [
            {
                "id": 1,
                "time": "18:00:00",
                "preference": "low"
            },
            {
                "id": 2,
                "time": "16:00:00",
                "preference": "high"
            }
        ],
        "date": "2024-05-05"
    }
]
},
{
    "accepted": [
        {
            "id": 2,
            "fname": "Dev",
            "lname": "S",
            "email": "dev@mail.com",
```

```json
        "status": "accepted",

        "non_busy_dates": [

            {

                "id": 1,

                "non_busy_times": [

                    {

                        "id": 1,

                        "time": "18:00:00",

                        "preference": "low"

                    },

                    {

                        "id": 2,

                        "time": "16:00:00",

                        "preference": "high"

                    },

                    {

                        "id": 3,

                        "time": "16:00:00",

                        "preference": "low"

                    },

                    {

                        "id": 4,

                        "time": "18:00:00",

                        "preference": "high"

                    }

                ],

                "date": "2025-05-05"

            },

            {

                "id": 3,

                "non_busy_times": [

                    {

                        "id": 2,
```

```json
                        "time": "16:00:00",

                        "preference": "high"

                    },

                    {

                        "id": 5,

                        "time": "10:00:00",

                        "preference": "low"

                    }

                ],

                "date": "2025-05-04"

            }

        ]

    },

    {

        "id": 1,

        "fname": "Raz",

        "lname": "A",

        "email": "raz@mail.com",

        "status": "accepted",

        "non_busy_dates": [

            {

                "id": 1,

                "non_busy_times": [

                    {

                        "id": 1,

                        "time": "18:00:00",

                        "preference": "low"

                    },

                    {

                        "id": 2,

                        "time": "16:00:00",

                        "preference": "high"

                    },
```

```json
                {
                    "id": 3,
                    "time": "16:00:00",
                    "preference": "low"
                },
                {
                    "id": 4,
                    "time": "18:00:00",
                    "preference": "high"
                }
            ],
            "date": "2025-05-05"
        },
        {
            "id": 3,
            "non_busy_times": [
                {
                    "id": 2,
                    "time": "16:00:00",
                    "preference": "high"
                },
                {
                    "id": 5,
                    "time": "10:00:00",
                    "preference": "low"
                }
            ],
            "date": "2025-05-04"
        }
    ]
}
],
"declined": [],
```

```
        "pending": []

    }

]
```

Get Suggested Schedules

- Endpoint: events/create_event?calendar_id=1
- Method: GET
- Description: Get suggested schedules a specific calendar.
- URL Params: `pk` is the calendar ID.
- Response:

```
{

    "schedule_groups": [

        {

            "schedule_group_id": 3,

            "schedules": [

                {

                    "schedule_id": 5,

                    "date": "2025-05-05",

                    "time": "16:00:00",

                    "owner": "razeen",

                    "contact": "Dev"

                },

                {

                    "schedule_id": 6,

                    "date": "2025-05-05",

                    "time": "18:00:00",

                    "owner": "razeen",

                    "contact": "Raz"

                }

            ]

        },

        {

            "schedule_group_id": 4,
```

```
        "schedules": [

            {

                "schedule_id": 7,

                "date": "2025-05-05",

                "time": "18:00:00",

                "owner": "razeen",

                "contact": "Dev"

            },

            {

                "schedule_id": 8,

                "date": "2025-05-05",

                "time": "16:00:00",

                "owner": "razeen",

                "contact": "Raz"

            }

        ]

    }

  ]

}
```

Finalize Schedule

- Endpoint: events/create_event/
- Method: POST
- Description: Finalize an event
- Payload:

```
{

    "calendar_id":1,

    "schedule_group_id": 4

}
```

- Response:

```
{
```

```json
    "detail": "Events created and calendar finalized successfully.",

    "events": [

        {

            "event_id": 1,

            "start_time": "2025-05-05 18:00:00",

            "end_time": "2025-05-05 19:00:00",

            "contact": "Dev"

        },

        {

            "event_id": 2,

            "start_time": "2025-05-05 16:00:00",

            "end_time": "2025-05-05 17:00:00",

            "contact": "Raz"

        }

    ]

}
```

Invite User to Calendar

- Endpoint: notify/calendars/invite/
- Method: POST
- Description: Invite a user to a specific calendar.
- Payload:

```json
{

    "calendar_id": 1,

    "contact_id": 4

}
```

- Response:

```json
{

    "detail": "Invitation email sent successfully to user@mail.com",

    "invitation": {

        "id": 4,
```

```
        "calendar": 1,

        "invited_contact": 4,

        "status": "pending",

        "invited_contact_non_busy_dates": [],

        "unique_token": "22ac6b7d-98f8-46e3-b372-5cb85d78a305"

    }

}
```

Send Reminder

- Endpoint: notify/calendars/reminder/
- Method: POST
- Description: Send a reminder email for a pending invitation.
- Payload:

```
{

    "calendar_id": 1,

    "contact_id": 4

}
```

- Response:

```
{

    "detail": "Reminder email sent successfully to user@mail.com",

    "invitation": {

        "id": 4,

        "calendar": 1,

        "invited_contact": 4,

        "status": "pending",

        "invited_contact_non_busy_dates": [],

        "unique_token": "22ac6b7d-98f8-46e3-b372-5cb85d78a305"

    }

}
```

Notify Finalized Schedule

- Endpoint: notify/calendars/notify_finalized/
- Method: GET
- Description: Notify all users of a finalized schedule/event.
- Payload:

```json
{

    "calendar_id": 1

}
```

- Response:

```json
{

    "message": "Notifications sent to all contacts",

    "events": [

        {

            "id": 6,

            "calendar": 1,

            "start_time": "2025-05-05T16:00:00Z",

            "end_time": "2025-05-05T17:00:00Z",

            "contact_email": "user@mail.com",

            "contact_full_name": "User S"

        }

    ]

}
```

View Status

- Endpoint: notify/calendars/status/?status=<str:status>&calendar_id=<int:pk>
- Method: GET
- Description: View the status of invitations for calendars.
- Query Parameters: `status` is the status of the invitation, `calendar_id` is the calendar ID.
- Response:

```json
{

    "count": 1,

    "next": null,

    "previous": null,
```

```json
    "results": [

        {

            "calendar_id": 1,

            "status": "accepted",

            "usernames": [

                "user1",

                "user2"

            ]

        }

    ]

}
```

Invited User Landing

- Endpoint: notify/invited_user_landing/<uuid:unique_link>/
- Method: GET, POST
- Description: Get owner's preferences on GET, save availability data on POST.
- Response (GET):

```json
{

    "owner_preferences": [

        {

            "id": 1,

            "non_busy_times": [

                {

                    "id": 4,

                    "time": "16:00:00",

                    "preference": "low"

                },

                {

                    "id": 34,

                    "time": "18:00:00",

                    "preference": "high"

                }

            ],
```

```json
                "date": "2025-05-05"
            },
            {
                "id": 14,
                "non_busy_times": [
                    {
                        "id": 36,
                        "time": "16:00:00",
                        "preference": "high"
                    },
                    {
                        "id": 37,
                        "time": "18:00:00",
                        "preference": "low"
                    }
                ],
                "date": "2024-05-05"
            }
        ],
        "invitation": {
            "id": 2,
            "calendar": 1,
            "invited_contact": 2,
            "status": "accepted",
            "invited_contact_non_busy_dates": [],
            "unique_token": "72817e4c-1450-4ef9-b78c-ee3d1120015c"
        }
    }
```

- Payload (POST):

```json
{
    "non_busy_dates": [
```

```json
        {
            "date": "2025-05-05",
            "non_busy_times": [
                {
                    "time": "16:00:00",
                    "preference": "low"
                },
                {
                    "time": "18:00:00",
                    "preference": "high"
                }
            ]
        },
        {
            "date": "2025-05-04",
            "non_busy_times": [
                {
                    "time": "10:00:00",
                    "preference": "low"
                },
                {
                    "time": "16:00:00",
                    "preference": "high"
                }
            ]
        }
    ]
}
```

- Response (POST):

```json
{
    "detail": "user1 preferences updated for this calendar",
```

```json
"invitation": {

    "id": 2,

    "calendar": 1,

    "invited_contact": 2,

    "status": "accepted",

    "invited_contact_non_busy_dates": [

        {

            "id": 18,

            "non_busy_times": [

                {

                    "id": 33,

                    "time": "16:00:00",

                    "preference": "low"

                },

                {

                    "id": 34,

                    "time": "18:00:00",

                    "preference": "high"

                },

                {

                    "id": 36,

                    "time": "16:00:00",

                    "preference": "high"

                },

                {

                    "id": 37,

                    "time": "18:00:00",

                    "preference": "low"

                }

            ],

            "date": "2025-05-05"

        },

        {
```

```
                "id": 19,

                "non_busy_times": [

                    {

                        "id": 35,

                        "time": "10:00:00",

                        "preference": "low"

                    },

                    {

                        "id": 36,

                        "time": "16:00:00",

                        "preference": "high"

                    }

                ],

                "date": "2025-05-04"

            }

        ],

        "unique_token": "72817e4c-1450-4ef9-b78c-ee3d1120015c"

    }

}
```

Invited User Decline

- Endpoint: notify/invited_user_landing/<uuid:unique_link>/decline
- Method: GET
- Description: Declines a users availability for a calendar on GET.
- Response (GET):

```
{

    "detail": "Invitation declined successfully",

    "invitation": {

        "id": 2,

        "calendar": 1,

        "invited_contact": 2,

        "status": "declined",

        "invited_contact_non_busy_dates": [
```

```json
        {
            "id": 18,
            "non_busy_times": [
                {
                    "id": 33,
                    "time": "16:00:00",
                    "preference": "low"
                },
                {
                    "id": 34,
                    "time": "18:00:00",
                    "preference": "high"
                },
                {
                    "id": 36,
                    "time": "16:00:00",
                    "preference": "high"
                },
                {
                    "id": 37,
                    "time": "18:00:00",
                    "preference": "low"
                }
            ],
            "date": "2025-05-05"
        },
        {
            "id": 19,
            "non_busy_times": [
                {
                    "id": 35,
                    "time": "10:00:00",
                    "preference": "low"
```

```json
                },
                {
                    "id": 36,
                    "time": "16:00:00",
                    "preference": "high"
                }
            ],
            "date": "2025-05-04"
        }
    ],
    "unique_token": "72817e4c-1450-4ef9-b78c-ee3d1120015c"
    }
}
```