

# Documentation For Appointify (P2)

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### 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.

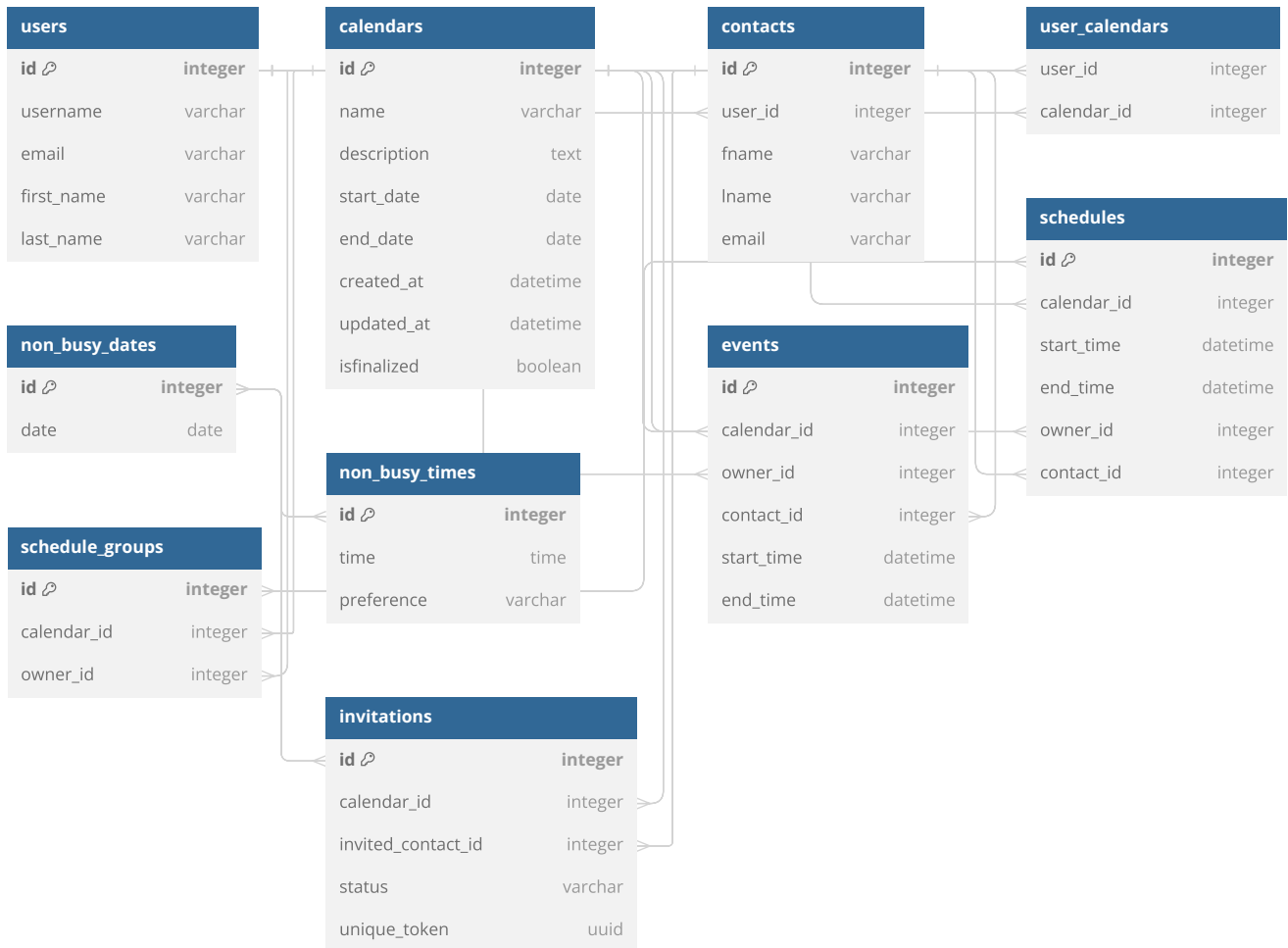
## Invitation

- **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



## 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:

```
{
  "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/

```
{  
  
  "name": "TEST Calendar",  
  
  "description": "THIS IS IT",  
  
  "start_date": "2024-03-01",  
  
  "end_date": "2024-03-31"  
  
}
```

Response:

```
{  
  
  "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/`

```
{  
  
  "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.

## View List of Contacts

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

Example:

Request: GET `/api/contacts/`

Response:

```
[
  {
    "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: `/api/contacts/create/`
- Method: POST
- Description: Create a new contact for the authenticated user.

Example:

Request: `POST /api/contacts/create/`

```
{
  "fname": "Alice",
  "lname": "Smith",
  "email": "alice.smith@example.com"
}
```

Response:

```
{
  "id": 5,
  "fname": "Alice",
  "lname": "Smith",
  "email": "alice.smith@example.com"
}
```

## Update Contact

- Endpoint: `/api/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 /api/contacts/update/5/`

```
{
  "lname": "Johnson"
}
```

```
}
```

Response:

```
{
  "id": 5,
  "fname": "Alice",
  "lname": "Johnson",
  "email": "alice.smith@example.com"
}
```

## View Single Contact

- Endpoint: `/api/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 `/api/contacts/5/`

Response:

```
{
  "id": 5,
  "fname": "Alice",
  "lname": "Johnson",
  "email": "alice.smith@example.com"
}
```

## Delete Contact

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

Example:

Request: DELETE `/api/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"  
  
          },  
  
        ]  
  
      },  
  
    ]  
  
  }  
  
]
```

```
        {
            "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",
```

```
"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,
```

```

        "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"

                },

            ],

        },

    ],

}

```



```
        {
            "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:

```

{

```

```
"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:

```
{

  "calendar_id": 1,

  "contact_id": 4

}
```

- Response:

```
{

  "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:

```
{
  "calendar_id": 1
}
```

- Response:

```
{
  "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:

```
{
  "count": 1,
  "next": null,
  "previous": null,
```

```
"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):

```
{  
  "owner_preferences": [  
    {  
      "id": 1,  
      "non_busy_times": [  
        {  
          "id": 4,  
          "time": "16:00:00",  
          "preference": "low"  
        },  
        {  
          "id": 34,  
          "time": "18:00:00",  
          "preference": "high"  
        }  
      ],  
    },  
  ],  
}
```

```

        "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):

```

{
    "non_busy_dates": [

```



```

{
  "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):

```

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

```

```
"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": [

```

```
{  
  "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"  
}
```