

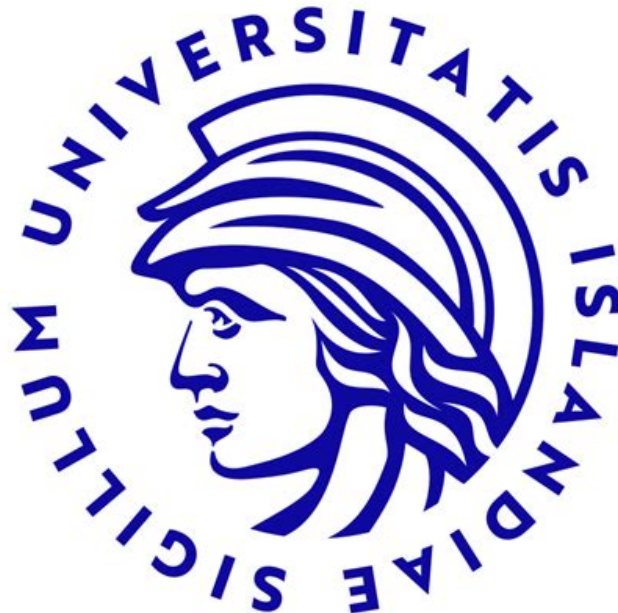
Software Project 2

Team 12

VibeVault

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1 Introduction

For assignment 1 we decided to reuse the details of assignment 1 from HBV501G. The first half of this document contains the requirements for the current assignment and then from section 6 are the details from the previous assignment for reference.

2 Project Vision

2.1 1.1 Background

The project started with a book club idea, this idea then was generalized to a social media site. After analyzing popular social media sites and trying to extract the most useful and practical features, using discord as our biggest direct inspiration. We decided to create a minimalistic social media site. Focused on the Event as the core design element. We kept our scope small, focusing on small, invite-only groups.

2.2 2.3 Scope of subsequent releases

Immediate:

- Develop and deploy iOS and website versions of the application.
- Maintenance.
- Increased backwards compatibility.
- Accessibility features.

Near future:

- Increased social features:
 - Friends.
 - Private messaging.
 - Public groups.
- Allow users to discover other groups based on their interests and/or location.
- Localization:
 - Translate to most common languages.

Far future:

- Monetization:
 - Sell ad space.
 - Allow companies to create public events where anyone can join/show interest (concerts and other special events).

2.3 3.3 Deployment Considerations

Access Requirements for Users

- Supported Devices:
 - Mobile devices: Smartphones, tablets.
 - Web: Desktop and mobile browsers.
- Internet Connectivity:
 - Stable internet connection required for real-time features and cloud synchronization.
 - Offline mode (if applicable) should enable limited functionality.
- Authentication:
 - Account required for personalized experience and data storage.
 - Authentication via email and password or third-party providers (e.g., Google, Apple, Facebook).

User Registration and Distribution

- Registration Methods:
 - In-App Registration: Users can sign up through the mobile application.
 - Web Registration: Users can register via the website.
- Invitation System:
 - Existing users can invite others via email or in-app links.
- Global Availability:
 - The application is available globally via the Google Play Store for Android devices.

Platforms Supported

- Android:
 - Minimum supported version, 12
- Web:
 - Compatible with modern browsers

Infrastructure Requirements

- Backend Services:
 - Localized
- API Integration:
 - Unified API for mobile and web communication to ensure data consistency
- Push Notifications:

- Real-time updates for event invitations, group activities, and reminders

Training and Support Requirements

- User Documentation:
 - Available online and within the app for feature explanation
- In-App Tutorial:
 - Descriptions of features and their functions as a user navigates the application.

3 Product Backlog

3.1 High Priority (P1)

- **User Story 1 [US1; P1]:** As a group member, I want to be able to create events within a group I am part of, so that I can organize gatherings with other members.
- **User Story 2 [US2; P1]:** As a user, I want to be able to create groups, so that I can collaborate and plan events with others.
- **User Story 3 [US3; P1]:** As an event creator, I want to be able to invite group members to an event, so they are aware and can choose to participate.
- **User Story 4 [US4; P1]:** As a group admin, I want to be able to update group settings, so I can manage the group's name, description, tags, and privacy options.
- **User Story 5 [US5; P1]:** As a user, I want to see a list of events I am attending or interested in, so I can keep track of my commitments.
- **User Story 6 [US6; P1]:** As a user, I want to be able to create an account, so that I can access and use all platform features.
- **User Story 7 [US7; P1]:** As a user, I want to log into my account, so that I can access my groups, events, and settings.
- **User Story 8 [US8; P1]:** As a user, I want to be able to invite other users to my groups, so they can join and participate in discussions and events.

3.2 Medium Priority (P2)

- **User Story 9 [US9; P2]:** As a group admin, I want to be able to accept or decline user invitations, so I can control who joins the group.
- **User Story 10 [US10; P2]:** As a group admin, I want to be able to see important group activity, such as new members, event creations, and changes in settings, so I can stay informed and manage the group effectively.
- **User Story 11 [US11; P2]:** As a user, I want to be able to update my profile settings, so I can change my name, email, password, and preferences.
- **User Story 12 [US12; P2]:** As a user, I want to be able to leave a group I am part of, so that I can remove myself from groups I no longer wish to participate in.

- **User Story 14 [US14; P2]:** As an event creator, I want to be able to edit event details, such as the time, location, description, and invite list, so I can make updates when needed.
- **User Story Mobile 2 [USM2; P2]:** As a group member, I want to receive notifications when a new event is created within my group, so I stay informed about upcoming activities.

3.3 Low Priority (P3)

- **User Story 13 [US13; P3]:** As a user I want to be able to comment on events, to relay any relevant information to other event goers or the host.
- **User Story Mobile 1 [USM1; P3]:** As a user, I want to set my profile picture by either taking a new photo with my camera or selecting an existing image from my device, so I can personalize my account.

4 User Story Estimates

We will be using the following formula for the PERT estimate $\frac{X+4Y+Z}{6}$

User Story	Best Case	Most Likely	Worst Case	PERT Estimate
US1	16	24	40	25.33
US2	12	20	34	21
US3	2	6	10	6
US4	2	4	8	4.33
US5	10	20	30	20
US6	6	18	28	17.66
US7	2	4	10	4.66
US8	4	10	16	10
US9	1	4	8	4.16
US10	8	16	20	15.33
US11	4	10	14	9.667
US12	4	6	10	6.33
US13	3	10	14	9.5
US14	8	16	25	16
USM1	9	20	30	20
USM2	6	16	28	16
Total	97	204	325	205

5 Project Schedule

Week	User Stories	Expected Hours	P.O. (Initials)	Sprint	Consultation
1	None	XX	JOÓ	1	A1 Presentation
2	USX, Android skeleton	40	JOÓ	1	Model Drafts
3	US2, US6, US7, US11	53	BS	2	A2 Presentation
4	US1, US3, US4	35.66	BS	2	Dev support

5	US12, US14	22.5	BS	2	Dev support
6	US5, USM1	40	HSS	3	A3 Presentation
7	US8, US9	14	HSS	3	Dev support
8	US10, US13	25	HSS	3	Dev support
9	USM2	16	ÓÁ	4	A4 Presentation
10	xx	XX	ÓÁ	4	A5 Presentation

6 Business Requirements

6.1 Success Metrics

The success of VibeVault will be evaluated based on indicators such as the total number of registered users and of private groups. Additionally, metrics related to user engagement, including frequency of logins and active participation of created groups, will be systematically tracked and analyzed.

6.2 Vision

For: Friend groups and like-minded people.

Who: Need a private platform to connect, share interests, and schedule events.

The: VibeVault.

Is: An invite-only social hobby platform.

That: Provides space for discussions, discovery, and hobby-based activities.

Unlike: Platforms like Discord, Reddit and Facebook that either focus on singular hobbies or general social interactions.

Our Product: Encourages event planning, bonding over media, and group discussions.

6.3 Scope of Initial Release

The initial release will focus on:

- Creation of users and groups.
- Customizable access control for groups.
- Event creation and management.
- Activity logs and event chats.

7 Use Cases

7.1 Use Case 1: Event Scheduling

- **Name:** Event Scheduling
- **Scope:** Scheduling system

- **Level:** User goal
- **Primary Actor:** User
- **Preconditions:**
 1. User is logged in.
 2. User has permission to create an event.
- **Success Guarantee:**
 - User inputs event details.
 - System saves and creates the event.
 - System sends out invitations.
 - Other users can interact with the event.
- **Main Success Scenario:**
 1. User goes to the event scheduler.
 2. User enters event details.
 3. User selects participants.
 4. User sets possible reminders.
 5. User saves event
 6. System creates event and sends invitations.
 7. Users receive the invitation and are able to interact with the event.
- **Extensions / Alternate Scenarios:**
 - Conflict in dates/times:
 1. System informs user of conflict.
 2. System suggests alternative dates.
 - User does not specify a required aspect:
 1. System informs user of missing requirements.
 - System fails to send invitations:
 1. System displays error message.
 2. System tries to resend invitations.
 3. System informs user to contact administrator.
 - System error.
- **Special Requirements:**
 - Different time zone support.
 - Integration with calendar applications.
- **Technology and data variations list:**
 - Different types of events
 - * Recurring events.
 - * All-day events.

* Timed events.

- **Miscellaneous / open issues:**

- How to handle event conflict?
- Notification management?
- Timed events.

7.2 Use Case 2: Group Creation

- **Name:** Group Creation.

- **Scope:** The groups homepage.

- **Primary Actor:** User

- **Preconditions:**

1. User is registered.
2. User is logged in.

- **Success Guarantee:**

- User inputs groups details.
- User saves the group.
- System creates the group
- System sends out group invitations.
- Group is accessible by users.

- **Main Success Scenario:**

1. User navigates to group creation page.
2. User enters group details.
3. User selects initial members.
4. User saves group settings.
5. System creates group and notifies user.
6. System sends group invitations and notifies user.

- **Extensions / Alternate Scenarios:**

- No group customization made by user:
 1. System uses default group settings.
- User does not specify a required aspect:
 1. System informs user of missing requirements.
- System is unable to create group:
 1. System displays error message.
 2. System notifies user.
 3. System prompts user to try again.
 4. System asks to contact administrator.

- **Miscellaneous / open issues:**
 - How does the system handle group deletion?
 - How are inactive groups handled?
 - How is group privacy maintained?

7.3 Use Case 3: Activity Log

- **Name:** Activity Log.
- **Scope:** The groups homepage.
- **Primary Actor:** User.
- **Stakeholders and interests:**
 - **User:** Wants to view activity and interact.
 - **Group members:** Can interact with events.
 - **Administrator:** Want to ensure that the system tracks groups activities properly and allows for smooth user interaction.
- **Preconditions:**
 1. User is registered.
 2. User is connected to a group.
- **Success Guarantee:**
 - User can view activity log.
 - User can interact with events visible on activity log.
 - Users can vote ongoing polls.
- **Main Success Scenario:**
 1. User arrives at the group homepage.
 2. System displays activity log.
 3. User can interact with activity log.
 4. System displays interactions.
- **Extensions / Alternate Scenarios:**
 - User votes on member invitations:
 1. System records users vote.
 2. If it is a deciding vote:
 - (a) System sends out a notification.
 - (b) System deletes poll.
 - User navigates to an existing event.
 - User votes on member expulsion:
 1. System records users vote.
 2. If it is a deciding vote:

- (a) System notes decision and acts accordingly.
 - (b) System deletes poll.
- or expulsion, and system updates accordingly.

- **Special Requirements:**
 - Real-time notifications.
- **Frequency of occurrence:**
 - Every time user navigates to group page.
- **Miscellaneous / open issues:**
- How does the system handle sorting?
- How does the system handle filtering?

8 Brief Use Cases

1. **Event Comment:** POST: Create a new resource.
 - The user is in the event window and clicks on the chat box, the user types a comment and submits it. The comment gets displayed on the event page and the activity log is updated.
2. **Leave Group:** PATCH: Update resource details.
 - The user has navigated to the group settings and finds the “leave club” button. He clicks it and is prompted for confirmation, the user clicks accept and is removed from the group. The activity log is updated.
3. **Reschedule Event:** PATCH: Update resource details.
 - The user navigates to an event he has already created and clicks on the “time of event” feature. He can now insert a new event time. The participants are notified and the activity log is updated.
4. **Vote Kick:** PATCH: Update resource with a dependency check.
 - A user navigates to another user’s page and clicks the “vote kick” button. He fills out a chat box with justifications. The activity log is updated and other users can now click the “vote leave”, “abstain” or “vote stay button”. The vote is registered and submitted.
5. **Vote Invite:** POST: Create new resource.
 - A user clicks on the invite user button on the homepage, the user inserts a name, email and optionally a description for the user being invited. The activity log is updated and other users can now click the “vote invite”, “abstain” and “vote reject” button. The vote is registered and submitted.
6. **Changing Group Settings:** PATCH: Update a single attribute.
 - A user with the admin privileges clicks has navigated to the group settings page. He modifies some value and clicks “save”. The activity log is updated and other users can now click the “accept change”, “abstain”, “reject change” button. They’re vote is registered and submitted.