

CollabSpace

App Concept: CollabSpace

Purpose:

A **collaborative workspace app** for managing group projects, brainstorming ideas, and tracking shared tasks. It integrates real-time collaboration tools, idea boards, and task assignments, making it ideal for teams or creative individuals working together.

Folder Structure

Structure

```
/CollabSpace
|
|— /assets                # Static resources
|   |— /images            # Icons, project covers, task status graphics
|   |— /videos            # Tutorials or welcome guide
|   |— /themes            # Color schemes for workspace
|   |— /sounds            # Notification sounds
|
|— /lib                   # Main application logic
|   |— main.dart          # App entry point
|   |— /models            # Data models
|       |— Project.dart   # Model for projects
|       |— Task.dart      # Task details and status
|       |— User.dart      # User profile and roles
|       |— IdeaBoard.dart # Collaborative idea boards
|       |— Notifications.dart # Notification preferences
|   |— /screens           # Main screens of the app
|       |— HomeScreen.dart # Dashboard for all projects
|       |— ProjectScreen.dart # Overview of tasks and ideas
|       |— TaskScreen.dart  # Detailed task view
|       |— IdeaBoardScreen.dart # Collaborative brainstorming board
|       |— TeamScreen.dart  # Team management (roles, chat)
|       |— AnalyticsScreen.dart # Project progress tracking
|       |— SettingsScreen.dart # App customization and preferences
```

```

|   |   └─ NotificationsScreen.dart # Notification settings
|   └─ /widgets                        # Reusable UI components
|   |   └─ ProjectCard.dart          # Display project overview
|   |   └─ TaskCard.dart             # Task preview with status
|   |   └─ IdeaTile.dart             # Idea card for brainstormi
ng
|   |   └─ TeamMemberTile.dart       # Show team members
|   |   └─ ProgressBar.dart         # Task or project progress
indicators
|   |   └─ CalendarWidget.dart       # Calendar view for task de
adlines
|   └─ /services                      # App services
|   |   └─ ProjectService.dart       # CRUD for projects
|   |   └─ TaskService.dart         # Task management and track
ing
|   |   └─ CollaborationService.dart # Real-time updates (e.
g., Firebase)
|   |   └─ AnalyticsService.dart     # Track team and project me
trics
|   |   └─ NotificationService.dart  # Send task updates or r
eminders
|   └─ /utils                        # Helper functions
|   |   └─ DateUtils.dart            # Handle deadlines and remin
ders
|   |   └─ ColorUtils.dart           # Dynamic color themes
|   |   └─ Constants.dart            # App-wide constants (e.g.,
roles, statuses)
|
└─ /backend                          # Optional backend services
|   └─ /api                          # API endpoints for projects, task
s, and teams
|   └─ server.js                     # Main server file (if using Node.
js)
|   └─ /models                       # Backend schemas (projects, task
s, users)
|   └─ /services                     # Collaboration or progress analyt
ics
|   └─ /database                     # Data storage (e.g., Firebase, Po
stgreSQL)
|
└─ /docs                             # Documentation
|   └─ README.md                    # Overview of the app
|   └─ API_Documentation.md        # API endpoint details
|   └─ UX_Wireframes.pdf            # Wireframe designs
|
└─ /test                             # Unit and integration tests
|   └─ ProjectTests.dart
|   └─ TaskTests.dart

```

```
|   └─ CollaborationTests.dart
|
└─ /config                # Configuration files
    └─ firebase.json      # Firebase configuration
    └─ .env                # Environment variables
    └─ package.json        # Backend dependencies
```

Features

1. Project Management

- Create and organize projects into folders or categories.
- Assign tasks to team members with deadlines and priorities.

2. Collaborative Idea Boards

- Brainstorm ideas using drag-and-drop sticky notes or sketches.
- Attach files, images, or links to ideas for reference.

3. Real-Time Collaboration

- Share project updates, comment on tasks, and edit ideas live.
- See team member activity in real-time.

4. Task Tracking

- Create tasks, assign owners, and set progress statuses (e.g., "In Progress," "Completed").
- Use Kanban boards to organize tasks visually.

5. Team Management

- Invite team members, assign roles, and track individual contributions.
- Chat directly with teammates or comment on tasks and ideas.

6. Analytics and Reporting

- View task completion rates, team productivity, and deadlines.
- Generate project status reports for easy sharing.

7. Customizable Notifications

- Set reminders for upcoming deadlines or task updates.
- Choose notification frequency and preferences.

8. Integration-Friendly

- Sync with tools like Google Calendar, Trello, or Slack.
- Import/export tasks and projects as needed.

9. Themes and Personalization

- Choose themes that suit your project type or team mood.
 - Customize colors and layouts for a better experience.
-