

# SkillForge

## App Concept: SkillForge

### Purpose:

A **skill-building and habit-tracking app** designed to help users acquire new skills, develop consistent habits, and track their progress. The app integrates bite-sized lessons, habit streaks, and motivational insights to make learning and self-improvement fun and achievable.

## Folder Structure

### Structure

```
/SkillForge
|
├── /assets                # Static resources
|   ├── /images            # Icons, skill illustrations, and
badges
|   ├── /videos            # Tutorial and lesson videos
|   ├── /themes            # UI themes for personalization
|   └── /sounds            # Notification and achievement sou
nds
|
├── /lib                  # Main application logic
|   ├── main.dart          # App entry point
|   ├── /models            # Data models
|   |   ├── Skill.dart     # Skill data model
|   |   ├── Lesson.dart    # Lesson and progress tracki
ng
|   |   ├── Habit.dart     # Habit tracking model
|   |   └── UserProfile.dart # User data and preferences
|   ├── /screens          # Main screens of the app
|   |   ├── DashboardScreen.dart # Overview of skill progress
|   |   ├── SkillScreen.dart   # Skill details and lessons
|   |   ├── LessonScreen.dart  # Individual lessons with v
ideos or guides
|   |   ├── HabitScreen.dart   # Habit tracking and remind
ers
|   |   ├── AnalyticsScreen.dart # Progress analytics and ac
hievements
|   |   ├── CommunityScreen.dart # Join groups and challenge
s
|   |   └── SettingsScreen.dart # Customization and prefere
```

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nces
|   |— /widgets                # Reusable UI components
|   |   |— SkillCard.dart      # Display skills and progre
ss
|   |   |— LessonTile.dart     # Lessons list view
|   |   |— HabitTracker.dart   # Visual habit tracking cal
endar
|   |   |— ProgressBar.dart    # Skill progress indicators
|   |   |— AchievementBadge.dart # Show unlocked achievement
s
|   |   |— CommunityPost.dart  # User-generated posts and
comments
|   |— /services                # App services
|   |   |— SkillService.dart    # CRUD operations for skil
ls
|   |   |— HabitService.dart    # Manage habits and streak
s
|   |   |— AnalyticsService.dart # Generate progress insigh
ts
|   |   |— CommunityService.dart # Posts and challenges
|   |   |— NotificationService.dart # Habit and lesson remin
ders
|   |— /utils                  # Helper functions
|   |   |— DateUtils.dart       # Handle scheduling and stre
ak dates
|   |   |— SkillUtils.dart      # Logic for skill progress
|   |   |— Constants.dart       # App-wide constants
|
|— /backend                    # Optional backend services
|   |— /api                    # API endpoints for skills, lesson
s, and habits
|   |— server.js                # Main server file (if using Node.
js)
|   |— /models                  # Backend schemas (skills, habits,
users)
|   |— /services                # Community challenges or analytic
s
|   |— /database                # Data storage (e.g., Firebase, Mo
ngoDB)
|
|— /docs                        # Documentation
|   |— README.md                # Overview of the app
|   |— API_Documentation.md    # API endpoint details
|   |— UX_Wireframes.pdf        # Wireframe designs
|
|— /test                        # Unit and integration tests
|   |— SkillTests.dart
|   |— HabitTests.dart

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

## Features

### 1. Skill Library

- Browse and choose from a library of skills (e.g., coding, painting, fitness).
- Skills are categorized by difficulty and focus areas.

### 2. Lessons and Challenges

- Bite-sized lessons with tutorials, guides, or videos.
- Weekly challenges to apply learned skills.

### 3. Habit Tracker

- Create habits related to skill-building (e.g., "Practice guitar daily").
- Visualize streaks using a calendar-based tracker.

### 4. Progress Analytics

- Track time spent learning and skill completion progress.
- Earn points and badges for consistency and milestones.

### 5. Achievements

- Unlock achievements like "First 5 Lessons Completed" or "30-Day Streak."
- Share achievements with friends or the community.

### 6. Community

- Join groups based on skills and participate in group challenges.
- Share tips, progress, and lessons with others.

### 7. Reminders and Notifications

- Get notified for lesson schedules, habit check-ins, or streak progress.

### 8. Themes and Personalization

- Choose skill-based themes or create custom interfaces.