

BloomScape Project Mind Map

Frontend Architecture & Views

- Design & Develop Public Pages
 - Design wireframes and mockups for the Landing/Home page hero section by 2025.12.20.
 - Draft marketing copy and feature descriptions for the Landing/Home page by 2025.12.22.
 - Implement responsive HTML/CSS for the Landing/Home page by 2025.12.29.
 - Create content and layout for the Contact & Support page by 2026.01.05.
 - Draft initial Terms of Service and Privacy Policy content for Legal pages by 2026.01.12.
 - Develop user interface for Login, Register, and Forgot Password forms by 2026.01.19.
 - Integrate authentication forms with backend API endpoints for user submission by 2026.01.26.
- Implement Game Interface (The Land)
 - Design and create 3D assets for isometric grid tiles and basic terrain by 2026.02.05.
 - Develop a 3D viewport component with isometric projection for displaying the land by 2026.02.15.
 - Implement camera controls for zooming, panning, and rotation within the 3D viewport by 2026.02.22.
 - Create visual effects for day/night cycle rendering in the 3D viewport by 2026.03.01.
 - Design and implement the Heads-Up Display (HUD) layout by 2026.03.08.
 - Integrate real-time display of user "Sap" balance in the HUD by 2026.03.15.
 - Develop and integrate a dynamic Level/XP bar component into the HUD by 2026.03.22.
 - Implement a notifications container in the HUD for game alerts and messages by 2026.03.29.
 - Design and implement the Quick Action Menu (Water, Plant, Harvest) with contextual options by 2026.04.05.
- Develop Dashboard & Management Modals
 - Design wireframes for the Inventory Modal with tabbed views (Seeds, Bloomed Flowers, Items) by 2026.04.12.
 - Implement front-end logic for sorting and filtering items within the Inventory Modal by 2026.04.19.
 - Develop item detail view within the Inventory Modal for displaying stats and descriptions by 2026.04.26.
 - Design and implement the Marketplace Modal layout with live listings and price history charts by 2026.05.05.
 - Develop front-end components for Buy/Sell actions and "My Listings" management in the Marketplace by 2026.05.15.
 - Design and implement the Social Hub layout including Friend List, Leaderboard, and Inbox by 2026.05.25.
 - Develop UI for Friend List management (add, remove, view profiles) by 2026.06.01.
 - Create front-end components for displaying leaderboards and user rankings by 2026.06.08.
 - Implement basic messaging/inbox functionality within the Social Hub by 2026.06.15.
 - Design and implement the Profile & Settings page layout by 2026.06.22.
 - Develop UI components for user avatar customization by 2026.06.29.
 - Integrate account linking options (e.g., Instagram/Google) into the Profile & Settings by 2026.07.05.
 - Implement graphic settings toggles (Low/High quality) with client-side state management by 2026.07.12.

Admin & Backend Monitoring

- Develop Moderation Tools
 - Design and implement an Admin Panel UI for moderation tasks by 2028.05.05.
 - Develop backend API endpoints for user ban/mute system functionality by 2028.05.12.
 - Integrate ban/mute functionality into the Admin Panel UI by 2028.05.19.
 - Implement chat log review functionality (if chat exists) for moderation purposes by 2028.05.26.
 - Develop a system for flagging and reviewing suspicious market transactions by 2028.06.05.
 - Integrate flagged transaction review into the Admin Panel by 2028.06.12.
- Implement Game Balancing Tools
 - Develop an Admin Panel interface for adjusting spawn rates of flower rarities by 2028.06.19.
 - Implement backend services to dynamically adjust flower growth times without code deployment by 2028.06.26.
 - Create a tool within the Admin Panel to modify specific flower attributes and game parameters by 2028.07.05.
- Integrate Analytics & Monitoring
 - Set up analytics tracking for key metrics: DAU/MAU, retention rate, session duration by 2028.07.12.
 - Implement data collection for in-game events (planting, harvesting, trading, purchases) by 2028.07.19.
 - Develop a dashboard within the Admin Panel to visualize DAU/MAU and retention rates by 2028.07.26.
 - Implement real-time monitoring for economy inflation (total Sap in circulation, item prices) by 2028.08.05.
 - Design and implement an analytics report for economy health and trends by 2028.08.12.

Monetization Strategy

- Implement Premium Subscription Model
 - Define benefits of Premium Subscription (XP Boost, Reduced Market Tax, Exclusive Skin) by 2028.02.05.
 - Develop backend logic to manage subscription status and apply associated benefits by 2028.02.12.
 - Integrate third-party payment gateway for monthly subscription billing by 2028.02.19.
 - Design and implement UI for subscribing to Premium and displaying subscription status by 2028.02.26.
 - Develop logic to provide exclusive monthly cosmetic skins to premium subscribers by 2028.03.05.
- Develop Micro-transactions System
 - Define initial cosmetic decorations for sale (Skins for house/land) by 2028.03.12.
 - Integrate third-party payment gateway for one-time micro-transaction purchases by 2028.03.19.
 - Develop backend logic for processing micro-transaction purchases and granting items by 2028.03.26.
 - Design and implement an in-game store UI for browsing and purchasing cosmetic items by 2028.04.05.
 - Define "Instant Grow" potions, specifying their effect and daily usage limit by 2028.04.12.
 - Implement backend logic for "Instant Grow" potion usage, adhering to daily limits by 2028.04.19.
 - Design UI for purchasing and using "Instant Grow" potions by 2028.04.26.

Core Gameplay Mechanics

- Implement Flower Lifecycle Logic
 - Define and document state transitions for Flower Lifecycle (Seed -> Sprout -> Blooming -> Wilting) by 2026.07.20.
 - Develop backend logic for seed planting, validating tile selection and inventory consumption by 2026.07.27.
 - Implement server-side growth timers for each flower stage based on flower type by 2026.08.05.
 - Create visual representations for each flower growth stage (Seed, Sprout, Blooming, Wilting) by 2026.08.15.
 - Implement client-side display of flower growth progress and current stage by 2026.08.22.
 - Develop backend logic to trigger wilting if a flower is neglected (e.g., not watered for X time) by 2026.08.29.
- Develop Land Management System
 - Design and implement backend data structure for player land, including tile states and contents by 2026.09.05.
 - Develop API endpoints for interacting with individual land tiles (Dig, Plant, Water, Fertilize) by 2026.09.12.
 - Implement front-end UI for selecting and executing tile interactions by 2026.09.19.
 - Design and implement logic for grid expansion, including cost calculation and land slot allocation by 2026.09.26.
 - Develop UI for purchasing and expanding land slots by 2026.10.03.
- Define & Implement Flower Characteristics
 - Document base attributes for all initial flower species (Rarity, Growth Time, Water Consumption Rate) by 2026.10.10.
 - Implement backend data models to store flower attributes and their variations by 2026.10.17.
 - Develop a scoring system for flowers, calculating Base Points based on rarity and bloom quality by 2026.10.24.
 - Design and implement "Synergy Bonuses" logic based on adjacent flower types or environmental factors by 2026.10.31.
 - Integrate scoring system calculations with flower harvesting events by 2026.11.07.
- Implement Time Mechanics
 - Develop server-side logic for a persistent Day/Night cycle, tracking in-game time by 2026.11.14.
 - Integrate server-side time with client-side visual day/night rendering by 2026.11.21.
 - Define specific "Night Bloom" flower species and implement growth conditions tied to night cycle by 2026.11.28.
 - Develop server-side logic for monthly season changes, defining start/end dates by 2026.12.05.
 - Implement a system to adjust the available seed pool in the marketplace or rewards based on current season by 2026.12.12.

Social & Acquisition Features

- Implement Social Interaction Features
 - Develop backend logic for players to visit friends' lands by 2027.10.26.
 - Implement "Watering" friends' plants functionality, granting small XP bonuses to both players by 2027.11.05.
 - Develop backend logic and UI for gifting seeds or items to friends by 2027.11.12.
 - Integrate Friend interaction actions (visit, water, gift) into the Friend List UI by 2027.11.19.
- Develop External Connections
 - Design and implement backend system for generating and validating unique QR codes by 2027.11.26.
 - Develop API endpoint for users to scan QR codes and receive "Mystery Seeds" by 2027.12.05.
 - Implement client-side QR code scanner integration (if applicable, or manual entry) by 2027.12.12.
 - Define "Social Media Rewards" criteria (e.g., linking Instagram, following BloomScape) by 2027.12.19.
 - Develop backend logic to verify social media actions and grant rewards like "Insta-Rose" by 2027.12.26.
 - Implement UI for linking social media accounts and claiming rewards by 2028.01.05.
 - Design and implement a Referral System, generating unique referral codes for users by 2028.01.12.
 - Develop backend logic to track referrals and grant starter packs to both referrer and referee by 2028.01.19.
 - Implement UI for inviting friends and tracking referral status by 2028.01.26.

Gamification & Progression

- Develop XP & Leveling System
 - Define experience point (XP) values for core actions (planting, watering, harvesting) by 2027.06.05.
 - Implement backend logic for accumulating XP and tracking player level by 2027.06.12.
 - Define level-up thresholds and associated unlocks (rare seeds, land expansions, new tools) by 2027.06.19.
 - Implement logic to grant level-up rewards to players upon reaching new levels by 2027.06.26.
 - Integrate XP gain and level progression display into the HUD and profile by 2027.07.05.
- Implement Leaderboards (Competitive)
 - Define "Cumulative Score" calculation based on flower rarity, synergy bonuses, and land value by 2027.07.12.
 - Develop backend service to calculate and store monthly player rankings based on Cumulative Score by 2027.07.19.
 - Implement a system to reset monthly leaderboard scores and archive previous month's results by 2027.07.26.
 - Define exclusive badges, unique seeds, and achievements as rewards for top 10 players by 2027.08.05.
 - Develop backend logic to distribute leaderboard rewards to eligible players at month's end by 2027.08.12.
 - Integrate leaderboard display into the Social Hub UI, showing current and past rankings by 2027.08.19.
- Create Achievements System
 - Define initial achievement categories and specific achievements (Collector, Trader, Socialite) by 2027.08.26.
 - Develop backend logic to track player progress towards various achievement criteria by 2027.09.05.
 - Implement a system to grant achievement rewards (Titles, Profile Borders, Sap bonuses) upon completion by 2027.09.12.
 - Design UI for an in-game achievement display, showing progress and completed achievements by 2027.09.19.
- Define User Roles/Tags
 - Define system for assigning and displaying standard user roles (Member, Verified) by 2027.09.26.
 - Define system for assigning and displaying special user roles (Premium, Moderator, Admin, Beta Tester) by 2027.10.05.
 - Implement backend logic for role management and permission checks by 2027.10.12.
 - Develop UI elements to visually represent user roles/tags (e.g., icons next to username) by 2027.10.19.

Economy & Marketplace (Closed Economy)

- Define & Implement Currency System
 - Establish "Sap" as the primary in-game currency and document its uses by 2027.01.05.
 - Develop backend services for managing player "Sap" balances (add, subtract, transfer) by 2027.01.12.
 - Implement logic for earning "Sap" by selling bloomed flowers to the marketplace by 2027.01.19.
 - Develop a system for daily "Sap" rewards or login bonuses by 2027.01.26.
- Develop Marketplace Logic
 - Design and implement backend data models for player-to-player listings (flowers, items) by 2027.02.05.
 - Develop API endpoints for players to create new listings, set prices, and cancel listings by 2027.02.15.
 - Implement API endpoints for players to browse and purchase listings from other players by 2027.02.25.
 - Develop a real-time price fluctuation algorithm based on supply and demand for specific items by 2027.03.05.
 - Implement historical price tracking for items to display in the marketplace UI by 2027.03.12.
 - Develop backend logic for applying a transaction tax (e.g., 5-10%) on marketplace sales by 2027.03.19.
- Implement Items & Tools System
 - Define initial set of Consumables (Fertilizers, Pest Repellents) with their effects and durations by 2027.03.26.
 - Develop backend data models and logic for managing consumable inventory and usage by 2027.04.05.
 - Implement effects of fertilizers (speed up growth) on flower growth timers by 2027.04.12.
 - Implement effects of pest repellents (protect flowers) against potential wilting or damage events by 2027.04.19.
 - Define initial set of Tools (Watering Cans, Shovels) with different capacities/functionalities by 2027.04.26.
 - Develop backend data models and logic for managing tool inventory and usage by 2027.05.05.
 - Implement tool usage effects (e.g., watering multiple tiles with a larger watering can) by 2027.05.12.
 - Design initial set of Decorations (non-playable items) for land aesthetic customization by 2027.05.19.
 - Develop backend data models and logic for managing decoration inventory and placement on land by 2027.05.26.