

1. Add account points/currency to DB
 - Verify DB table + API read/write path
 - New column/field exists for points. New user should have 0 points.
 - Points update globally after refresh
 - Screenshot of DB schema, user rows before & after points update
2. Add points animation
 - When points are awarded, animation triggers exactly once per award event
 - Verify the Event + UI when points are awarded
 - 5 second Video-clip of successful award → animation
3. Add points counter to user page
 - user page needs to show points (verify User/Profile page)
 - refreshing page shows persistent values
 - Screenshot of profile page with correct points visible/ points changing (before & after)
4. Add points counter to toolbar
 - Verify point counter on toolbar, and verify it on global nav bar/tool bar
 - Points are visible on every page where toolbar appears
 - No overflow display on large values (999+ points)
 - Screenshot of toolbar showing functioning points
5. Add admin tool to add points
 - Verify admin page + permissions
 - Admin can select a user + enter amount + submit
 - User's points update in DB and reflect in UI
 - Screenshot/video of admin adding points and user points increasing
 - Screenshot of non-admin access blocked
6. Award points for completing quests
 - Verifying the question completion lifecycle
 - Completing a quest triggers points award
 - Same quest cannot be exploited repeatedly
 - Screen recording: complete quest → points increase → refresh still increased
7. Add profile pictures functionality
 - Screenshot: profile picture displayed
 - users can set/change profile pictures
 - Selected picture persists after refresh/re-login
8. Create initial set of profile pictures
 - verify initial set in folder
 - At least a number of profile picture are set
 - Screenshot of the folder directory containing profile pictures (names visible)

9. Add tab for profile picture shop
 - verify on nav bar + shop page
 - Shop displays available pictures + price
 - Screenshot/video of a “purchase/select” action and resulting change
 - Screenshot of shop page functioning successfully
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10. Create Tab for Campus Guesser game
 - Nav tab + route to Campus Guesser landing screen
 - screenshot of tab + landing screen.
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11. Create database of KU campus photos with correct location metadata
 - DB table schema + sample rows (photo id/url + lat/long + tags + difficulty)
12. Build game interface displaying random campus photo
 - Interface that displayed random photos of campus via JPEG, PNG, etc.
 - Gameplay screen showing random photo render; short video demonstration
13. Create interactive KU campus map for user guessing
 - interactive and dynamic map, 1:1 to KU campus
 - Map UI with clickable guess placement; screenshot showing pin drop + coordinates captured
14. Implement scoring system based on guess proximity
 - Scoring formula documented + example calculation (two sample guesses) + UI showing score result
15. Add round timer with configurable time limits
 - Timer visible + settings control + proof it ends round at 0 via short screen recording.
16. Display correct location after each guess with accurate distance info
 - Post-guess results screen: correct pin + user pin + distance label.
17. Create multi-round game structure (5 rounds per game)
 - Round counter + transitions; video showing rounds 1→5.
18. Calculate and display total score at end of game
 - End screen with total score + per round breakdown
19. Link CampusGuesser scores to existing user account points
 - After game end, points increase in user wallet; screenshot DB + UI.
20. Add CampusGuesser achievements to user profile
 - Achievement earned event + profile display.
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21. Update Side Quest homepage to feature CampusGuesser
 - Add CampusGuesser section/card on homepage
 - Add CTA button (“ Play CampusGuesser”)
 - CTA routes to CampusGuesser landing page
22. Create admin interface for adding new campus photos
 - Admin-only upload form (image and metadata)
 - Submitting creates DB row successfully
 - Non-admin user are blocked from access
23. Implement photo tagging system (buildings, landmarks, etc.)
 - Add tags field to photos in DB
 - Admin can add/edit tags per photo
 - Admin can filter/search photos by tag
24. Add difficulty rating to photos (easy/medium/hard)
 - Add difficulty rating to photos (easy/medium/hard)
 - Admin can set difficulty on upload/edit
 - Game can pull photos by selected difficulty
25. Create photo verification system to ensure accuracy
 - Add status: pending/approved/rejected
 - New uploads default to pending
 - Game only uses approved photos
26. Implement difficulty levels (different campus areas / photo pools)
 - Add difficulty selection before starting
 - Each difficulty uses a different photo pool
 - Different selections produce different photo sets
27. Add hint system (reveal building/general area)
 - Add hint button on gameplay screen
 - Hint reveals building/general area info
 - Add rule: cooldown or point cost
28. Create timed challenge mode with speed bonuses
 - Add mode selector (Normal vs Timed)
 - Timed mode adds countdown + ends at 0
 - Bonus points scale with time remaining
29. Add daily challenge with specific photo set
 - Add “Today’s Challenge” entry point
 - Daily photo set is deterministic for all users
 - Daily set changes based on date (server-defined)
30. Create CampusGuesser leaderboard (daily/weekly/all-time)
 - Leaderboard page with tabs (daily/weekly/all-time)
 - Sort by score (desc) with tie-break rule
 - Shows usernames + scores + ranks
31. Add animations for leaderboard records
 - Animate rows on load/new entry
 - Animate rank changes (up/down)
 - Animation triggers once per update

32. Implement share score to social media feature
 - Add “Share” button on results screen
 - Generate share text + link (or image card)
 - Open share modal / copy-to-clipboard
33. Update map detail for CampusGuesser
 - Improve map styling (labels/paths/landmarks)
 - Constrain bounds to KU campus area
 - Keep map performance smooth
34. Design responsive game interface for mobile devices
 - Layout adapts to mobile widths cleanly
 - No overflow for timer/buttons/map
 - Works on at least 2 common viewport sizes
35. Add tutorial/onboarding for first-time players
 - First-run tutorial overlay walkthrough
 - “Don’t show again” toggle
 - Persist tutorial completion state
36. Implement visual feedback for guess accuracy (heatmap/ring)
 - Show accuracy visual after each guess
 - Include legend for meaning of colors/rings
 - Keep distance label visible too
37. Create game statistics page (accuracy, favorite locations)
 - Add stats page linked from profile/game
 - Track 3+ metrics (avg distance, best score, games played)
 - Show “favorite locations/tags” summary
38. Set up Supabase tables for CampusGuesser game data
 - Create tables for games/rounds/guesses/photos
 - Add FKs + indexes for key relationships
 - Store enough data to rebuild results history
39. Create API endpoints for game logic and scoring
 - Endpoints: start game, get photo, submit guess, end game
 - Validate auth + inputs server-side
 - Return consistent JSON + status codes
40. Implement photo randomization algorithm avoiding repeats
 - Use shuffle/bag method per game session
 - Guarantee no repeats within a 5-round game
 - Reset only on new game or bag exhaustion