

Qzone

Oct 9, 2025

A Location Based Survey Platform

Team member: Zhenyang Qian, Xuotong Fu, Yifei Bao

Product Introduction

The image displays two mockups of the QZone mobile application. The left mockup is the login screen, featuring the 'QZone' logo at the top. Below the logo are two input fields: 'Username' with a person icon and 'Password' with a lock icon. A link 'Forgot your password?' is positioned below the password field. At the bottom, there is a link 'Don't have an account? [Create](#)'. The right mockup shows a survey titled 'City Park Feedback' with a progress indicator '1/5'. The survey question is 'How satisfied are you with the cleanliness of Boston Common?'. There are three radio button options: 'Satisfied', 'Neutral', and 'Dissatisfied'. Below these is a text input field with the placeholder 'Type your answer'. At the bottom of the survey are 'Previous' and 'Next' buttons. The bottom of the app features a navigation bar with three icons: a document, a star, and a person.

QZone

Username

Password

[Forgot your password?](#)

Don't have an account? [Create](#)

City Park Feedback 1/5

How satisfied are you with the cleanliness of Boston Common?

Satisfied

Neutral

Dissatisfied

Type your answer

Previous Next

QZone is a next-generation mobile survey platform developed in Kotlin for Android. It aims to improve the survey experience by connecting survey creators (researchers, marketers, etc.) with a diverse and engaged user base through a geo-targeted reward system.

The process is simple: users open the app to find a list of nearby surveys, complete them for points, and redeem those points for tangible rewards.

For instance, after leaving a store, a user might get a push notification to review their shopping experience in exchange for points.

What is the problem?

For Users:

Current survey tools (e.g., web forms, email links) often provide a clunky, unengaging user experience on mobile devices. The motivation to participate is low due to a lack of immediate and valuable incentives. This leads to high drop-off rates and "survey fatigue."

For Clients:

It is challenging and expensive to acquire high-quality, geographically diverse data samples. Existing platforms lack the ability to dynamically target users based on their real-world location.

Features: Survey

20:23

City Park Feedback

1/5

How satisfied are you with the cleanliness of Boston Common?

Satisfied

Neutral

Dissatisfied

Type your answer

Previous Next

Survey icons: document, star, profile

20:23

Profile picture: User with red glasses

Name

Xuetong Fu

Email

fxuetong@bu.edu

Password

Country/Region

China

Save changes

Survey icons: document, star, profile

MVP

- **Onboarding:** Fast login with Google/Meta/X.
- **Location Feed:** GPS-based local survey list (core).
- **Rewards:** Base points plus creator-set bonuses.
- **Multimedia UI:** Answer via text, images, audio, video.
- **Profiles:** Manage avatar, region, interests.
- **Modern UI/UX:** Dark/Light modes, Material 3 theming.

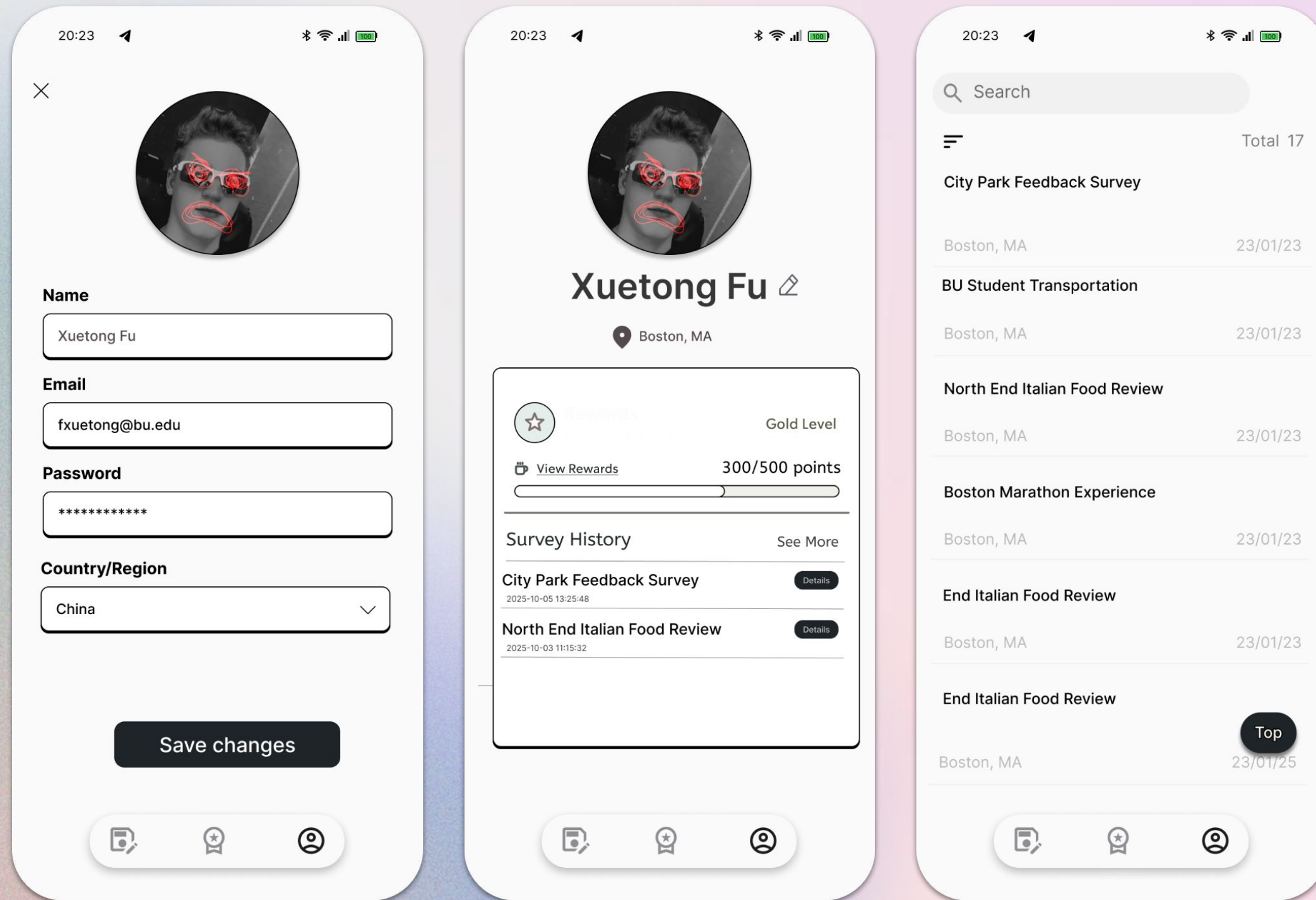
Stretch Goals

- **Discovery & Targeting:** Interest/demographic matching; search, filters, invite codes; interactive map.
- **Gamification:** Shake-to-refresh; in-app credits for gift cards/coupons.
- **Accessibility:** Color-blind themes, dynamic font sizing, high contrast.

Web Portal (Creators)

- **Builder:** Intuitive survey creation.
- **AI & Templates:** Prompt-based question generation.
- **Analytics:** Real-time dashboard, charts, exportable reports.

Features: Profile



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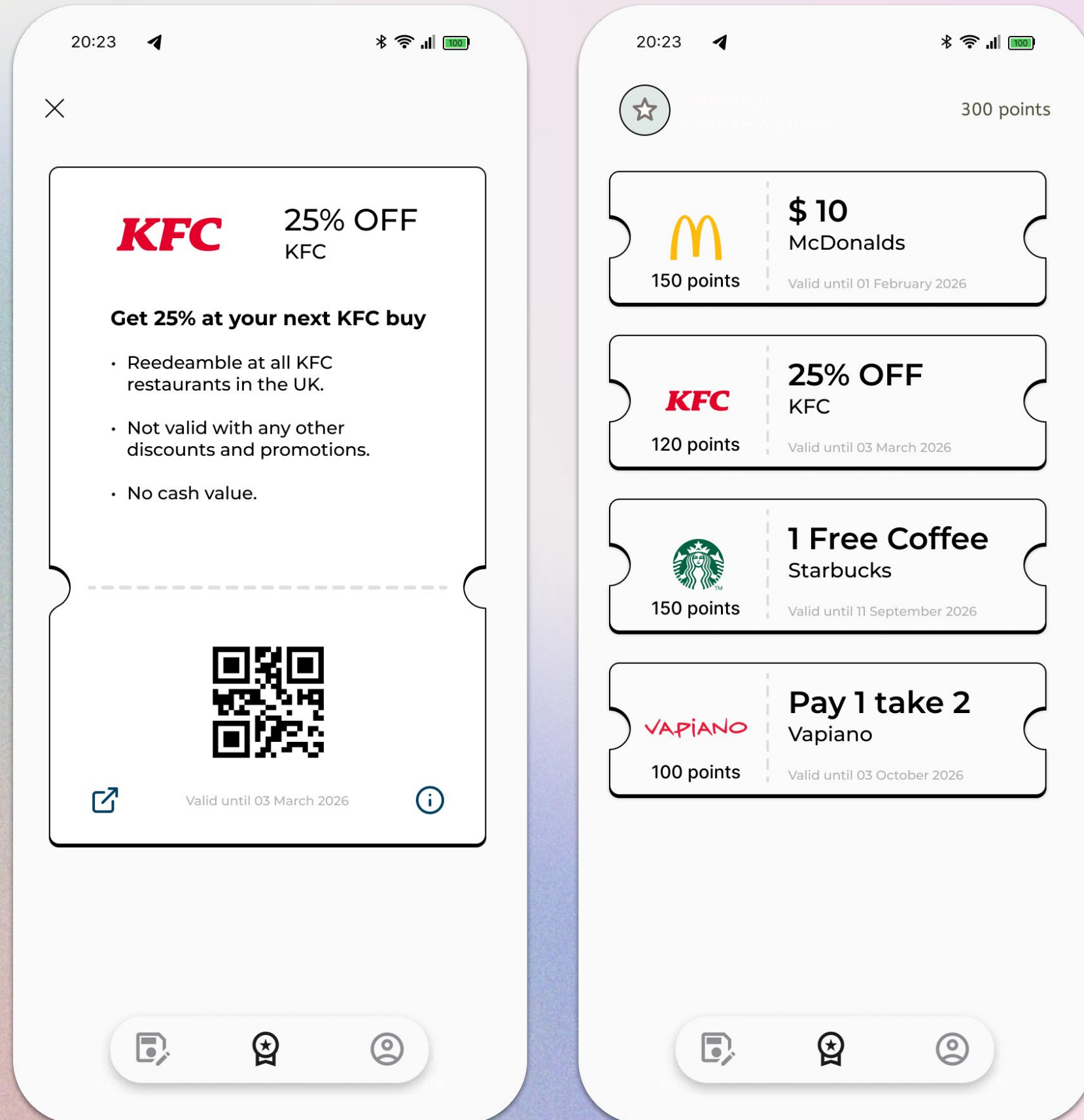
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Features: Rewards



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WHAT ABOUT TECH STACKS?



First and foremost:

Jetpack compose and MVVM

External APIs: Google Identity Services, Firebase Authentication / Firestore, Google Maps SDK for Android.

Onboard Sensors: GPS / Network Location, Gyroscope, Camera API, Microphone API

Data Storage: Proto DataStore(local data caching)



Team responsibilities

As a collaborative team of three, we will share all design and architecture decisions.

Yifei Bao: Leads user onboarding, login, and user profile data management, survey recommendation algo design.

Xuetong Fu: Leads the survey engine, including the interface for answering questions and submitting data.

Zhenyang Qian: Leads location integration (GPS) for the survey feed and the logic for the rewards system.



Agile Workflow Plan

Week 1 (Oct 6): Finalize and submit our project proposal, and establish the core project architecture.

Week 2 (Oct 13): Begin building the user authentication flow while simultaneously creating the foundational UI for the survey engine.

Week 3 (Oct 20): Enable users to login and navigate to a home screen where a basic, interactive survey can be viewed.

Week 4 (Oct 27): Connect the UI to a live backend to display surveys and show a basic point reward upon completion for our first demo.

Week 6 (Nov 10): Fully implement the dynamic, location-based survey feed and connect the rewards logic to the user's profile.

Week 7 (Nov 17): Implement a core sensor feature like 'shake-to-refresh' and add local data caching for offline support. Starting to implement rewards system.

Week 8 (Nov 24): Following our Interim Presentation 2 (Nov 25), we will polish the core experience and begin developing a stretch goal like the map view.

Week 9 (Dec 1): This week is for comprehensive testing, bug fixing, and overall UI/UX refinement.

Week 10 (Dec 8): We will incorporate feedback from the Final Rehearsal (Dec 9) and prepare all final documentation and presentation materials.

Week 11 (Dec 15): Deliver our final presentation and submit the completed QZone project on Dec 16.



Risks and open questions

- Points-based incentives may induce cheating and low-quality responses—anti-abuse measures and the cost model need validation
- GPS-based location may affect battery life and cpu performance and have potential privacy and security problems.
- How to balance location update frequency and accuracy between privacy compliance and battery life?
- How to set appropriate reward system to attract users?