Test Plan
HopSkipDrive "Forgot Password" feature

1. Introduction

1.1 Purpose:

This test plan outlines the strategy for testing the new "Forgot Password" feature for HopSkipDrive mobile application. The feature is scheduled for release to mobile users by May 1st, 2025.

1.2 Objective:

To ensure that the "Forgot Password" future functions correctly, securely, and provides a seamless user experience across all supported platforms and devices.

1.3 Feature Description

The "Forgot Password" feature allows users who have forgotten their account password to reset it through a verification process, typically involving email verification and creation of a new password.

2. Scope

2.1 In scope:

• User interface and navigation flow of the "Forgot Password" feature

• Email validation and verification process

• Password reset functionality

• Error handling and messaging

• Cross-platform functionality (iOS and Android)

• Security and data validation

2.2 Out of scope:

• Backend server performance testing

• Load/stress testing

• Penetration testing(assumed to be handled by security team)

• Integration with third-party authentication services

3. Testing Approach

3.1 Testing levels:

As the first QA resource establishing testing practices for this feature, I've designed a comprehensive testing approach covering multiple levels:

• *Functional testing:* Verify all functionality of the feature works as expected

• *Integration testing:* Test interaction with email services and authentication systems

• *Usability testing:* Evaluate user experience and workflow efficiency

• *Compatibility testing:* Verify functionality across supported devices and OS versions

3.2 Testing types:

• *Manual testing:* Comprehensive manual testing of all user flows

• *Regression testing:* Ensure existing functionality remains intact

• *Behavioral analysis testing:* Watch how actual users navigate the forgot password flow to identify where they get confused or abandon the process

• *Exploratory testing:* Unscripted testing to discover potential issues

4. Test Environment

4.1 Hardware requirements:

• iOS device for testing (iPhone model used: iPhone 14 Pro Max)

4.2 Software requirements:

• *iOS version:* iOS 18.3.1

• *HopSkipDrive app version:* v 3.9.0-598

4.3 Network requirements:

• Stable WiFi connection

• Cellular data connection

• Poor network connection situation

5. Entry Criteria

• Feature development is complete and deployed to QA environment

• All known critical and high-priority defects from development are resolved

• Test environment is stable and accessible

• Test data is available

• Test cases are prepared and reviewed

6. Exit Criteria

• All test cases have been executed

• No critical or high-severity defects remain open

• All medium-severity defects have been assessed and approved for release

• Test coverage meets or exceeds 95% of planned tests

• All required documentation is complete

• Final approval obtained from:

- QA Manager (for testing completion)

- Product Manager (for feature requirements satisfaction)

- Engineering Lead (for technical implementation)

7. Testing Approach for May 1st Deadline

To ensure the "Forgot Password" feature meets the May 1st, 2025 release deadline, I recommend:

- **Shift-left approach:** Begin with early sanity testing as soon as components become available, providing immediate feedback to developers before formal QA builds

- **Prioritized execution:** Focus on critical path tests first (account validation, email delivery, password reset)

- **Iterative verification**: Schedule regular check-ins to verify bug fixes, ensuring issues are addressed promptly before moving to next test phases

- **Risk-based approach**: Allocate more testing time to high-risk areas (security, data handling)

- **Parallel testing**: Test independent components simultaneously when possible

This approach allows for flexibility while ensuring sufficient time for regression testing before the release date.

8. Key Risks

- Email delivery issues may impact testing efficiency

- User trust impact: Password reset is a critical security function that directly impacts user trust. Testing should consider not just functionality but psychological factors like perceived security and confidence in the process

- Integration with authentication systems could require additional verification

- Multi-factor considerations: If future authentication enhancements include multi-factor options, how will the password reset flow integrate with these security layers?

- Password reset time limitations: How long should password reset links/codes remain valid? What happens if a user initiates multiple reset requests across different times or devices?

- Cross-device testing might reveal inconsistencies in UI/UX

I would document and communicate any encountered risks immediately, including specific impact on the testing timeline and suggested mitigation approaches.

9. Recommended Testing Tools

- *Device:* iPhone 14 Pro Max with iOS 18.3.1

- Screenshots and screen recording for defect documentation

- Test Execution Matrix documenting test case results (status, date executed, defects found, severity)

10. Extended Testing Recommendations

10.1 Critical Questions for Enhanced Testing

As part of my approach to comprehensive testing, I would pose these questions to the development team:

- How does the system handle concurrent reset requests from the same user across different devices?

- How are users verified if they've forgotten their password AND no longer have access to their verification email?

- How does the system handle edge cases like email bounces or delayed delivery?

- What happens if a user attempts to log in with old credentials after initiating but not completing a password reset?

If additional resources were available, I would recommend:

• Testing on multiple Android devices (Samsung, Google Pixel) to ensure consistent cross-platform functionality

• Testing on older iOS versions (iOS 16/17) to verify backward compatibility

• Accessibility testing using screen readers and other assistive technologies

• Automated regression test development for critical password reset flows

• Performance testing of email delivery across different mail providers

11. Approval

Prepared by: Anastasy Rogers

Date: 02/26/2025

Reviewed By:

Sr. QA Manager:

Name:

Signature:

Date:

Product Owner Approval:

Name:

Signature:

Date:

Comments/Notes: