1. **Introduction**
    Test Plan Objective:

    ○ **Ensure a smooth user experience across different devices**, confirming that the app is responsive, and provides a good experience on both iOS and Android devices.

    Scope of Testing:
    User Registration: Testing user sign-up, profile setup, photo upload, and bio creation.
    Search: Testing the search functionality and the matchmaking algorithm based on preferences (age, interests, location).
    Messaging: Validating the sending, receiving, and deletion of messages, as well as notification delivery for new messages.

2. **Test Items**
    - Registration form fields.
    - Profile Editing
    - Search Filters
    - Match Suggestions based on user data
    - Send and receiving messages
    - Safety messaging feature

3. **Test Criteria**
    - **Entry Criteria:**
    1.   The app has been deployed to the testing environment.
    2.   Test cases and testing scripts have been reviewed and finalized.
    3.   Testing devices (iOS and Android) are ready, configured, and available.
    4.   Test data (user profiles, messaging data) is prepared.
    - **Exit Criteria:**

        All high-priority test cases have been finished.

        All major bugs have been discovered.

        Test cases have been documented, and defects have been documented and tracked

        The testing team has documented the final test summary report.

4. **Resources**

        Human Resource: Test Lead: Maya Ward – Responsible for managing the testing process, overseeing test execution, and preparing the test report.

Testers: Sophie Daniels, Mariah Carey,

Developers Emmanuel Taylor, Vernistine Saler

Software and hardware: Mobile Devices: iOS iPhone 15 and Android Samsung Galaxy S22 devices.

- Testing Tools:
  - Atlassian for bug tracking and test case management.

5. Schedule

- **Preparation Phase**: 11/01/2024 - 11/05/2024
  - Test case creation, test environment setup, and configuration of devices.
- **Execution Phase**: 11/06/2024 - 11/10/2024
  - Execution of functional test cases for core features (user registration, profile creation, messaging, notifications).
- **Review Phase**: 11/11/2024 - 11/14/2024
  - Review of test results, defect logging, and communication with the development team.
- **Final Report & Release**: 11/15/2024
  - Final test report preparation and delivery. Release readiness assessment.

6. Test Environment

Servers: Cloud-based testing environment mirroring production settings.

Network Configuration: Testing should be done on various network types (Wi-Fi, 4G, 5G) to ensure functionality under different internet speeds.

Browsers:

- Mobile app tests on the latest iOS and Android versions.

Devices:

- iPhone 15 (iOS).
- Samsung Galaxy S22 (Android)

7. Roles and Responsibilities

Test Lead:

- Oversee the testing process.
- Coordinate with testers and developers.
- Prepare the test summary report and communicate with stakeholders.

Testers:

- Execute test cases for registration, profile setup, messaging, and search.
- Log defects in the bug-tracking system.
- Document test results, including any issues or deviations from expected behavior.

Developers:

- Address and fix defects identified during testing.
- Assist with setting up the test environment and handling configuration issues.

8. Test Cases

- Test Case 1: User Registration
  - Steps:
    1. Open the app and navigate to the registration screen.
    2. Fill in all required fields (email, password, age, gender).
    3. Click "Sign Up."
  - Expected Result: The user is registered successfully and redirected to the profile creation screen.
  - Actual Result.
- Test Case 2: Profile Setup
  - Steps:
    1. After registration, navigate to the profile settings.
    2. Upload a profile picture.
    3. Enter a short bio.
  - Expected Result: The profile is updated successfully with the photo and bio.
  - Actual Result:
- Test Case 3: Messaging
  - Steps:
    1. Log in and find a match.
    2. Send a message to the match.
    3. Receive the message and check the push notification.
  - Expected Result: The message is sent and received successfully with a push notification delivered.
  - Actual Result

9. Risks and Mitigations

Risk 1: **Push Notification Delays** – Notifications might be delayed or not delivered.

- **Mitigation**: Test push notifications in real-time to ensure they are triggered and received promptly.

Risk 2: **Geolocation Issues** – The app's location-based matchmaking may not function correctly under certain conditions.

- **Mitigation**: Test location features and simulate different locations.

10. Tools and Techniques

Selenium: For automating mobile test cases (if applicable).

Jira: For bug tracking, test case management, and test execution tracking.

Postman: For API testing (if applicable).

11. Reporting and Communication

Test Logs: Testers will document test results, including pass/fail status, defects found, and comments.

Bug Reports: Detailed bug reports will be logged in Jira, with steps to reproduce, severity, and expected timelines for fixes.

Test Summary Report: A final test summary report will be prepared by the test lead, which will include:

- **Test results.**
- **Defects and their resolution status.**
- **A recommendation for release readiness.**