Testing plan

Introduction

The Test Plan is designed to prescribe the scope, approach, resources, and schedule of all testing activities of the project Human Movement.

The plan identify the items to be tested, the features to be tested, the types of testing to be performed, the personnel responsible for testing, the resources and schedule required to complete testing, and the risks associated with the plan.

Scope

Functional Testing

- 1. User guide
- 2. Create User profile
- 3. APP collect user data
- 4. Add Visited place
- 5. Upload data
- 6. Allow App run in background.

Performance Testing

- 1. App under levels of traffic
- 2. Time to launch the app
- 3. Performance under varying network condition
- 4. Performance under low battery

Quality Object

- Ensure the Application Under Test conforms to functional and non-functional requirements
- Ensure the AUT meets the quality specifications defined by the client
- Bugs/issues are identified and fixed before go live

Roles and Responsibility

Test manager	Weizhe Feng
Developers	All
Installation Team	Unknown

Test methodology

In this project, Team have decide to adopt Agile methodology. Therefore, we will use incremental testing in agile development methods. Therefore, every release of the project is tested thoroughly. This ensures that any bugs in the system are fixed before the next release.

Test levels

The testing process is to automating tests which help ensure that your app performs correctly before you publish it, while retaining your feature and bug fix velocity.

Three categories testing are used for this mobile app:

- A unit test tests a single function, method, or class.
- A widget test (in other UI frameworks referred to as component test) tests a single widget.
- An integration test tests a complete app or a large part of an app.

	Unit	Widget	Integration
Confidence	Low	Higher	Highest
Maintenance cost	Low	Higher	Highest
Dependencies	Few	More	Most
Execution speed	Quick	Quick	Slow

Test completeness

- Specifies the criteria that denote a **successful** completion of a test phase
- Run rate is mandatory to be 100% unless a clear reason is given.
- Pass rate is 80%, achieving the pass rate is mandatory

Resource & Environment needs

1. Google Drive	Cloud storage to support
2. Android Device	Device for integration testing
3. Flutter testing package	Dart library support Flutter project testing.
4. Network	4G WiFi is needed