

TUNEPAL – USER TESTING PLAN

1. Introduction

TunePal is an app for identifying, searching, and managing traditional Irish tunes. Until now, its development has been product-focused with minimal end-user input. This plan outlines a structured approach for involving real users in the design, testing, and validation process using formal usability testing, task-based observation, Think-Aloud Protocol (TAP), and post-test analysis.

2. Goals of User Testing

- Identify usability issues with existing features.
- Measure user satisfaction and ease-of-use via SUS scores.
- Observe natural behaviour during interaction with app features.
- Improve navigation, terminology, and workflow based on user input.

3. Personas and Empathy Mapping

This plan is built around two core personas derived from real TunePal users:

3.1 Jane – Student Musician

A 21-year-old university student and beginner musician representing new users with limited technical experience.

3.2 Cillian – Experienced Fiddler

A 50-year-old fiddle player and teacher representing experienced musicians seeking simplicity and efficiency.

3.3 Empathy Mapping Summary

An empathy map was developed to represent both personas, capturing what each user type typically thinks, feels, says, and does. This helped the team identify their specific motivations, frustrations, and expectations, ensuring the testing scenarios address real user needs.

4. Testing Approach

We will use formal usability testing (Mayhew’s framework), Think-Aloud Protocol, and a SUS questionnaire post-test. The user will complete tasks in a controlled environment while their behaviour and comments are recorded.

5. Methodology

- Conduct one-on-one usability tests with 5-10 participants.

- Facilitate with a moderator, scribe, and observer.
- Use neutral prompts to encourage verbal feedback.
- Test in a quiet setting using real devices.
- Measure task completion, errors, time, and comments.

6. Test Materials

- Pre-Test Questionnaire
- Consent Form
- Test Task Sheet
- Moderator Script
- SUS Questionnaire
- Empathy Map and Personas
- Test Results Spreadsheet

7. Task Scenarios

Tasks include:

- Searching for a tune
- Using the microphone to identify a tune
- Saving a tune to favourites
- Exporting sheet music as PDF
- Exploring and joining a group feature

8. Analysis & Evaluation

We will analyse:

- Task success rate
- Errors and misunderstandings
- Time on task
- Comments and feedback
- SUS scores (average and per user)

Patterns will inform changes to UI layout, feature labels, and tutorials.

9. Iteration Plan

Initial results will guide a set of design updates. A second round of testing will validate improvements. Testing will continue until major usability issues are resolved and SUS scores average above 80.

10. Conclusion

This user testing plan ensures end-users are at the center of TunePal's continued development. Combining personas, task-driven testing, observation, and SUS metrics guarantees that improvements are backed by real user needs.

11. Appendix: Summary of User Test Results and Feedback

System Usability Scale (SUS) Summary:

A post-test System Usability Scale (SUS) questionnaire was completed by participants to assess the overall usability of the TunePal app. The SUS consists of 10 items rated on a 5-point Likert scale, ranging from Strongly Disagree (1) to Strongly Agree (5). The resulting scores were converted to a 0–100 scale.

Average SUS Score:

- **Participant Count:** 6
- **Average SUS Score:** 82.5/100
- **Interpretation:** This score indicates excellent usability, exceeding the standard benchmark of 68. It suggests that participants found the TunePal app easy to use, intuitive, and generally well-designed.

Common Issues Identified:

During the testing sessions, several usability issues were observed or reported:

1. Terminology Confusion

- Users were unsure what "Party" or "Group" meant within the app context.
- Recommendation: Rename or provide tooltips for unclear feature names.

2. Microphone Access

- Some users hesitated at the microphone permission prompt.
- Recommendation: Add an explanation prompt or tutorial screen before requesting mic access.

3. PDF Export Button Visibility

- One user struggled to locate the "Export PDF" button.
- Recommendation: Make the export option more prominent or include a visual icon.

Key Positive Feedback:

- Searching and playing tunes was described as “smooth and fast.”
- Users appreciated the clean layout and the simplicity of the favourites feature.
- The app was praised for being “very lightweight and intuitive” by multiple users.

Sample Completed SUS Form (Participant 3):

SUS Statement	Response (1–5)
1. I think I would like to use this system frequently.	5
2. I found the system unnecessarily complex.	2
3. I thought the system was easy to use.	5
4. I think that I would need the support of a technical person to use it.	1
5. I found the various functions in this system were well integrated.	5
6. I thought there was too much inconsistency in this system.	2
7. I would imagine that most people would learn to use this system quickly.	5
8. I found the system very cumbersome to use.	1
9. I felt very confident using the system.	5
10. I needed to learn a lot of things before I could get going with this app.	1

- **Converted SUS Score:** 87.5/100

This appendix supports the conclusion that the TunePal app is already highly usable but would benefit from minor improvements in clarity and discoverability. These findings will inform the next iteration of the design and testing cycle.

Appendices:

Appendix A – Consent Form

Informed consent form signed by participants prior to usability testing.

File: TunePal - Consent Form.pdf

Appendix B – Empathy Map

Visual empathy map outlining what users think, feel, say, and do during interaction with TunePal.

File: TunePal - Empathy Map.jpg

Appendix C – Pre-Test Questionnaire

Questions completed by participants to gather baseline data before testing.

File: TunePal - PreTest Questionnaire.pdf

Appendix D – SUS Questionnaire

System Usability Scale completed post-test to evaluate the usability of TunePal.

File: TunePal - System Usability Scale (SUS) Questionnaire.pdf

Appendix E – Task Sheet

List of predefined tasks participants were asked to perform during testing.

File: TunePal - Test Tasks.pdf

Appendix F – Test Results Spreadsheet

Excel file documenting observations, task success, completion times, errors, and SUS scores.

File: TunePal_Test_Results.xlsx

Appendix G – User Personas

Detailed persona profiles for Jane and Cillian, including goals, frustrations, needs, and context of use.

Files: TunePal - User Persona – Jane.png & TunePal - User Persona – Cillian.png

Appendix H – Moderator Script

Structured script used by the moderator to guide the usability test session.

File: TunePal - Test Script.pdf