Researcher Record Sheet

N/A indicates user requirements that are freeform and not directly linked to assessing a specific requirement. N/A (N) indicates requirements that were not in the initial requirement list but have been added as a result of ongoing feedback. NF refers to non-functional requirements.

Participant Number	P001
Participant Role (if disclosed)	Finance student

User Action No.	User Requirement Tested	Additional Guidance provided	Completed by the participant	Additional comments
1.1	1	No	Yes	Created an account quickly without issues
1.2	N/A	No	Yes	Selected preferences for investment topics
1.3	1	No	Yes	Easily found and edited profile details
1.4	1	No	Yes	Found the logout button in the top right menu
1.5	1	No	Yes	Login successful on first attempt
2.1	N/A (N)	No	Yes	Browsed through the course catalogue effectively
2.2	N/A	No	Yes	Selected "Investment Basics" course
2.3	5	No	Yes	Navigation between chapters was intuitive
2.4	5	No	Yes	Accessed lessons without difficulty
2.5	5	No	Yes	Used breadcrumb navigation to return to the course list
3.1	2	No	Yes	Found the trivia game from the main navigation
3.2	2	No	Yes	Selected "Medium" difficulty and "Investing" category
3.3	3	No	Yes	Completed questions within time limits
3.4	4	No	Yes	The score display was clear and detailed
3.5	3		Yes	Needed help finding the explanations section

3.6	8	No	Yes	Achieved a 5-question streak
4.1	8	No	Yes	Had trouble locating the game section initially
4.2	8	No	Yes	Completed business day cycle
4.3	8	No	Yes	Located Savings Challenge from the games menu
4.5	8	No	Yes	Engaged with Battle Budgets successfully
4.6	8	No	Yes	Completed one round and won against AI
5.1	5	No	Yes	Found the dashboard from the main navigation
5.2	5	No	Yes	Progress across courses is displayed clearly
5.3	5	No	Yes	The game scores section was easy to find
5.4	5	No	Yes	Mastery levels are displayed in the radar chart
5.5	5	No	Yes	The quiz history section showed performance trends
6.1	6	No	Yes	Found the achievements section under the more on the navbar
6.2	6	No	Yes	Progress bars for achievements were clear
6.3	4	No	Yes	Accessed the leaderboard from the main navigation
6.4	6	No	Yes	Point balance is displayed in the top header
6.5	6	No	Yes	Rewards shop accessible from the navbar
6.6	6	No	Yes	Rewards costs are displayed with the points balance
7.1	7	No	Yes	Located the challenge section easily
7.2	7	No	Yes	UI clearly showed different challenge states
7.3	77	No	Yes	Created a challenge via a prominent button
7.4	7	No	Yes	Select a testing partner from the dropdown
7.5	7	No	Yes	Configured quiz settings without difficulty
7.6	7	No	Yes	A challenge appeared in the pending section after submission
7.7	7	No	No	No challenges to accept during testing
7.8	7	Yes	Yes	Needed guidance on how to start the challenge

7.9	7	No	Yes	Results are displayed immediately after completion
7.10	7	No	Yes	The points awarded animation was visible
8.1	4	No	Yes	Located the leaderboard section easily
8.2	4	No	Yes	Leaderboard displayed with correct formatting
8.3	4	No	Yes	Switched between categories successfully
8.4	4	No	Yes	Its ranking was highlighted on the board
8.5	4	No	Yes	User entries showed appropriate information
8.6	4	No	Yes	Achievement badges are displayed next to usernames
8.7	4	Yes	Partially	The leaderboard did not update immediately after the challenge
8.8	4	No	Yes	Challenge results eventually affected the position
9.1	NF	No	Yes	Theme toggle worked successfully
9.2	NF	No	Partially	Tested on laptop only, responsive design seemed good
9.3	NF	No	Yes	Tab navigation worked well throughout the app
9.4	NF	No	Yes	Loading times were fast on a broadband connection
9.5	NF	No	Yes	Most UI elements were clear and well-labelled

Overall System Performance Observations

- Participants showed high engagement with the challenge and gamification features
- No major technical issues encountered during testing
- The participant navigated through most features with minimal guidance
- The challenge system was particularly interesting to this participant
- Some minor UI clarity issues with the explanations section in quizzes

Additional comments:

Participant noted that they would appreciate more advanced investment simulation features given their finance background. They suggested that adding real-world market data for investment practice would make the app more valuable for serious finance students. The participant was particularly impressed

with the battle budget feature but suggested adding more complexity to match real-world financial decision-making scenarios.

Requirements not aimed to be tested during the session: FR-10, FR-12, FR-15, NF-02, NF-03, NF-06, NF-07

These requirements involve advanced user scenarios (FR-10: API integration with financial institutions), optional features (FR-12: financial document upload and analysis), security features (FR-15: two-factor authentication), and technical requirements (NF-02: performance under high user load, NF-03: data encryption standards, NF-06: automated backup systems, NF-07: cross-platform compatibility testing) that require separate specialized testing approaches beyond standard user session testing.

Researcher Record Sheet

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Participant Number	P002
Participant Role (if disclosed)	Marketing student with no financial background

User Action No.	User Requirement Tested	Additional Guidance provided	Completed by the participant	Additional comments
1.1	1	Yes	Yes	Had difficulty with password requirements
1.2	N/A	No	Yes	Spent extra time exploring preference options
1.3	1	No	Yes	Successfully edited profile information
1.4	1	No	Yes	Found the logout option in the dropdown menu
1.5	1	No	Yes	Login was successful after an initial attempt
2.1	N/A (N)	No	Yes	Expressed interest in beginner-level courses
2.2	N/A	No	Yes	Selected "Personal Finance Fundamentals"
2.3	5	No	Yes	Chapter navigation was straightforward
2.4	5	No	Yes	Accessed and read through the lesson content
2.5	5	Yes	Yes	Initially tried the browser back button instead of app navigation
3.1	2	No	Yes	Found a trivia game after exploring menu options
3.2	2	No	Yes	Selected "Easy" difficulty and "General" category
3.3	3	No	Yes	Completed questions but ran out of time on 2 questions
3.4	4	No	Yes	Reviewed score breakdown with interest
3.5	3	No	Yes	Found explanations useful for incorrect answers
3.6	8	Yes	Partially	Managed a 3-question streak before the incorrect answer

4.1	8	Yes	Yes	Needed guidance to locate the games section
4.2	8	Yes	Yes	Required explanation of game mechanics
4.3	8	No	Yes	Found the Savings Challenge game easily
4.5	8	Yes	Yes	Needed a tutorial explanation for Battle Budgets
4.6	8	No	Partially	Completed round but lost to AI opponent
5.1	5	No	Yes	Located the dashboard from the profile menu
5.2	5	No	Yes	Expressed interest in progress visualisation
5.3	5	No	Yes	Found game scores in the performance section
5.4	5		Yes	Needed an explanation of the mastery level meaning
5.5	5	No	Yes	Reviewed quiz history sections
6.1	6	No	Yes	Found achievements through the navbar
6.2	6	No	Yes	Checked progress on beginner achievements
6.3	4	No	Yes	Located the leaderboard through the main navigation
6.4	6	Yes	Yes	Needed help finding the point balance display
6.5	6	No	Yes	Navigated to the rewards shop from the points display
6.6	6	No	Yes	Browsed available rewards with interest
7.1	7	No	Yes	Found the challenge section after exploring the menu
7.2	7	No	Yes	The interface layout was clear to the participant
7.3	77	No	Yes	Created a challenge using a prominent button
7.4	7	No	Yes	Selected a testing partner from the available users
7.5	7	Yes	Yes	Needed help understanding category selection
7.6	7	No	Yes	A challenge appeared in the pending section
7.7	7	No	Yes	Accepted the challenge from the testing partner
7.8	7	No	Yes	Completed the challenge quiz with a moderate score
7.9	7	No	Yes	The results comparison was clear and easy to understand
7.10	7	No	Yes	The points awarded animation were noticed
8.1	4	No	Yes	Located the leaderboard from the main navigation

8.2	4	No	Yes	Commented positively on the leaderboard design
8.3	4	No	Yes	Explored different leaderboard categories
8.4	4	No	Yes	Found his ranking near the bottom (new user)
8.5	4	No	Yes	User entries displayed appropriate information
8.6	4	No	Yes	Noted achievement badges with interest
8.7	4	Yes	Yes	Needed help to refresh the leaderboard after the challenge
8.8	4	No	Yes	Challenge completion changed the leaderboard position
9.1	NF	No	Yes	Successfully toggled between light/dark modes
9.2	NF	Yes	Partially	Tried on both laptop and smartphone
9.3	NF	Yes	Partially	Some difficulty with keyboard-only navigation
9.4	NF	No	Yes	Loading times are acceptable on average connection
9.5	NF	No	Partially	Found some game controls not immediately intuitive

Overall System Performance Observations

- The participant showed initial hesitation with financial content, but engaged well with gamification elements
- Some UI elements needed explanation, particularly game mechanics
- Leaderboard and achievements systems provided good motivation
- Mobile responsiveness had some minor issues with game controls
- The participant suggested more tutorials for financial novices

Additional comments:

The participant specifically requested more beginner-friendly tooltips and tutorials throughout the application. They mentioned feeling overwhelmed by financial terminology in some of the quiz questions and suggested including a glossary feature. The participant was very engaged with the achievement system and mentioned this would be their primary motivation for continued use. They also suggested adding short video tutorials for each game to help new users understand the mechanics more quickly.

Requirements not aimed to be tested during the session: FR-09, FR-11, FR-13, FR-14, NF-01, NF-04, NF-08

These requirements involve extended use scenarios (FR-09: notification systems, FR-11: financial goal tracking over time), administrator functions (FR-13: content management system for

administrators, FR-14: user activity analytics dashboard), and specialized technical requirements (NF-01: accessibility compliance for screen readers, NF-04: multilingual support infrastructure, NF-08: disaster recovery procedures) that require dedicated specialized testing approaches beyond standard user session testing with a novice user.

Researcher Record Sheet

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Participant Number	P003
Participant Role (if disclosed)	Business administration student with a part-time job

User Action No.	User Requirement Tested	Additional Guidance provided	Completed by the participant	Additional comments
1.1	1	No	Yes	Created an account efficiently with no issues
1.2	N/A	No	Yes	Selected budget management as primary interest
1.3	1	No	Yes	Navigated to profile via account icon in header
1.4	1	No	Yes	Logged out without difficulty
1.5	1	No	Yes	Logged back in with saved credentials
2.1	N/A (N)	No	Yes	Showed particular interest in investment courses
2.2	N/A	No	Yes	Selected "Advanced Trading Strategies" course
2.3	5	No	Yes	Navigation between chapters was intuitive
2.4	5	No	Yes	Accessed specific lessons with ease
2.5	5	No	Yes	Used navigation breadcrumbs effectively
3.1	2	No	Yes	Located the trivia section immediately
3.2	2	No	Yes	Selected "Hard" difficulty and "Investments" category
3.3	3	No	Yes	Answered questions quickly within the time limit
3.4	4	No	Yes	Reviewed score with interest in breakdown
3.5	3	No	Yes	Examined explanations for missed questions

3.6	8	No	Yes	Achieved 8-question streak (highest of participants)
4.1	8	No	Yes	Found the games section without difficulty
4.2	8	No	Yes	Completed business cycle with excellent profit
4.3	8	No	Yes	Accessed the Savings Challenge from the games menu
4.5	8	No	Yes	Played Battle Budgets confidently
4.6	8	No	Yes	Won round against AI with a significant margin
5.1	5	No	Yes	Located the dashboard from the main navigation
5.2	5	No	Yes	Analysed progress metrics across courses
5.3	5	No	Yes	Reviewed game performance statistics
5.4	5	No	Yes	Found mastery levels and analysed strengths
5.5	5	No	Yes	Reviewed quiz history with interest in patterns
6.1	6	No	Yes	Located the achievements section via the navbar
6.2	6	No	Yes	Checked progress toward advanced achievements
6.3	4	No	Yes	Accessed the leaderboard via the main navigation
6.4	6	No	Yes	Noted point balance is displayed in the header
6.5	6	No	Yes	Located the rewards shop via the navbar
6.6	6	No	Yes	Evaluated reward options based on point cost
7.1	7	No	Yes	Navigated to the challenge section easily
7.2	7	No	Yes	The UI organisation was immediately clear
7.3	77	No	Yes	Created a challenge using a button in the header
7.4	7	No	Yes	Selected opponent from the available users list
7.5	7	No	Yes	Configured challenging settings (hard difficulty)
7.6	7	No	Yes	A challenge appeared in the pending section after submission
7.7	7	No	Yes	Accepted the incoming challenge from another tester
7.8	7	No	Yes	Completed challenge quiz with high score
7.9	7	No	Yes	The results comparison is displayed clearly
7.10	7	No	Yes	Points awarded were tracked correctly

8.1	4	No	Yes	Located the leaderboard section from the menu
8.2	4	No	Yes	Leaderboard displayed with proper formatting
8.3	4	No	Yes	Efficiently switched between leaderboard categories
8.4	4	No	Yes	Found the ranking highlighted on the board
8.5	4	No	Yes	User entries showed comprehensive information
8.6	4	No	Yes	Achievement badges are displayed prominently
8.7	4	No	Yes	Leaderboard updated after challenge completion
8.8	4	No	Yes	Position improved after successful challenge
9.1	NF	No	Yes	Toggled between modes multiple times
9.2	NF	No	Yes	Tested on both a laptop and a tablet
9.3	NF	No	Yes	Successfully navigated using keyboard only
9.4	NF	No	Yes	Noted for fast loading times throughout the application
9.5	NF	No	Yes	All interactive elements were clear and usable

Overall System Performance Observations

- The participant showed high financial literacy and engaged deeply with advanced content
- Navigation was intuitive, with no guidance needed throughout testing
- The challenge system was particularly praised for its competitive element
- Performance across games and quizzes was consistently high
- The participant suggested adding more advanced investment simulation games
- Suggested improvement: difficulty scaling for experienced users

Additional comments:

The participant suggested implementing a stock market simulation game with real market data feeds. They mentioned that the current financial games, while engaging, could be more realistic for users with existing financial knowledge. The participant also expressed interest in a feature that would allow competing against professionals or industry benchmarks rather than just other users. They noted the application would be an excellent teaching tool for their business student organisation and inquired about group licensing options.

Requirements not aimed to be tested during the session: FR-16, FR-17, FR-18, FR-19, NF-05, NF-09, NF-10

These requirements involve advanced administrative functions (FR-16: administrative user management, FR-17: content moderation tools), system integration capabilities (FR-18: LMS

integration API, FR-19: financial institution data importing), and specialized technical requirements (NF-05: compliance with financial education standards, NF-09: penetration testing protocols, NF-10: extended load testing for school/institutional deployment) that require separate specialized testing approaches beyond standard user testing sessions. Additionally, these requirements primarily relate to institutional deployment rather than individual user experience.

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Participant Number	
Participant Role (if disclosed)	

User Action No.	User Requirement Tested	Additional Guidance provided	Completed by the participant	Additional comments

Overall System Performance Observations

Additional comments:

Requirements not aimed to be tested during the session: