

USER EVALUATION REPORT

GROUP 5 - BITCRUSHED BOB

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Report:

A task-based user evaluation was conducted to assess the usability of the game prototype. This method was selected as it facilitates the direct observation of users interacting with the system while performing representative tasks, thereby supporting the identification of usability issues during formative evaluation. Task-based evaluation is particularly suitable for interactive systems, as it allows usability problems to be revealed in the context of realistic use.

Participants were recruited from other teams within the cohort. This sampling approach allowed the acquisition of the target user group - university students - thereby aligning with the client's requirements. Prior to participation, all individuals were provided with an information sheet outlining the purpose of the study, the evaluation procedure, and data handling practices, ensuring informed consent and ethical compliance. A total of seven participants took part in the evaluation, this sample size was considered sufficient to achieve usability issue saturation, as formative usability testing with representative users typically identifies the majority of usability problems within a small number of participants.

Evaluation tasks were derived from the client's user and system requirements and focused on the most critical and high-risk aspects of the system, including core gameplay actions and key in-game events. Designing tasks around these areas ensured that the evaluation targeted functionality most likely to impact user experience and overall system performance. Tasks were designed to be realistic and representative of normal gameplay, increasing ecological validity.

The evaluation was conducted during a practical session, providing a convenient and realistic usage context. Participants played the game on a computer, matching the intended deployment environment. Prior to the evaluation, an internal pilot test was carried out with a project team member to validate task clarity and system stability. Feedback from this pilot informed refinements to both the tasks and the prototype.

During the evaluation sessions, participants completed the predefined tasks while performance data and observational notes were recorded. A Concurrent Verbal Protocol was used to capture participants' reasoning and difficulties in real time, enabling deeper insight. Additionally, after completing the tasks and playing through the game, short interviews were conducted to identify non-usability issues and collect additional feedback.

The collected data was compiled into a table and assigned severity ratings to prioritise identified issues, using a 4-point scale ranging from a cosmetic to a catastrophic problem. These findings were then used to develop design recommendations and inform proposed system redesigns. Problems were assigned corresponding requirements IDs to facilitate efficient system redesign.

Usability Problems:

Associated Requirement ID	Description	Severity Rating
UR_BOUNDARIES	It's difficult to discern which paths are viable and which paths aren't	2
UR_DIFFICULTY	The character moved too fast, and felt hard to control once gaining the speed boost	2
UR_NEGATIVE_EVENTS	The lecturer event was too long and it was unclear how long it would last	3
UR_UI	Hard to understand the map as it's too zoomed in	1
FR_DEAN,	The lecturer stops chasing after the initial capture	3
UR_DEAN	Too many deans making the players panic.	2
UR_NEGATIVE_EVENTS	NPCs don't work after the first interaction - i.e. ducks stop chasing	4
UR_UI	Text appears briefly and is hard to read while moving, preventing players fully understanding events, feedback or controls during play	3
UR_HIDDEN_EVENTS	Hidden events look too similar to normal coin collection and are not clearly communicated, meaning players may not realise they have encountered a hidden event or understand its effect.	3
UR_NEGATIVE_EVENTS	The survey task is too complex to accomplish and takes too much time.	2
UR_ACHIEVEMENTS	Players are unsure of their overall progress or objectives at certain points in the game, resulting in aimless exploration and reduced sense of achievements.	2
UR_ACHIEVEMENTS	Players are not clearly informed when achievements are unlocked or how they affect the final score, reducing motivation to pursue optional challenges.	2