

USE CASE: "VISION ASSIST"

Ricochet Robots Project

Group #6:

McDonald, Brianna
Younis, Faisal
Chikwati, Ngoni Nigel
Juwaheer, Yudish

Primary Actor: User

Stakeholders and Interests:

- Player: wants the game to work properly either with vision assistance enabled or disabled, be easy to use, entertaining, and possible to win.
- User: wants the game to be set up properly, and all the menus and settings to be functional together with the vision assist functionality.
- Parents: wants a child friendly game with ease of use to entertain.
- Team Members: wants to design vision assistance, implement it, and test the game to ensure it is working properly.

Preconditions: User has enabled colour vision assistance during the set-up phase of the game for using this feature during a gameplay.

Success Guarantee (Postconditions): The robots and targets are easily distinguishable by vision impaired players since they are now of a different colour palette or have some specific shapes to make them distinct.

Main Success Scenario:

1. The user selects the colour vision assistance option during the set-up phase of the game. [Alt 1: User does not select assist option]
2. The system registers the user's option with respect to colour assist.
3. The system changes the robots and targets to a different colour palette or makes use of specific shapes to make each element distinct.
4. The system displays the ricochet robots board with the newly configured elements so that they can be easily distinguished by vision impaired players.
5. The system then allows the player to start playing and the use case ends.

Alternative Flows:

Alt 1: User does not select assist option

1. If the user does not enable the vision assistance option during the set-up phase, then the board loads with the default layout.
2. Flow resumes at Main Success Scenario Step 5.

Exceptions:

- The system should not allow the vision assistance option to be disabled during an ongoing gameplay.
- If at any time the user exits the system, then the use case ends.

Special Requirements:

- The user must enable the vision assist option during the set-up phase for it to be implemented.

- Proper guidelines should be given for users taking advantage of the vision assist option.

Open Issues:

- Is the vision assist functionality working properly?
- Are the new colour palette and/or shapes easy identifiable?