

Please note that we also have all of our user stories in our GitHub repository. It should cover all the same ones here as well. We have only the client stories defined so far. User stories are colored.

Backlog

Template: As a [persona], I [want to], [so that].

Start user stories from here:

The client can view a list of puzzles that are complete or new (not yet completed). The client should provide a user-friendly way to view these puzzles and search through them. A human-readable name should identify puzzles, however, you are free to use a machine-generated ID that is not exposed to the user.

As a user, I want to be able to view all puzzles by name, and sort by difficulty (number of stars, etc)

The client must request a game from the server, display the game board, allow the user to add stars and mark empty cells, and inform the user if and when they have solved the puzzle.

As a user, I want to add markers and stars, so that I can play the game.

As the client program, I need to send a request to the server for where the stars are so that the client knows when the game is solved.

For the game board display, the client must use Java2D graphics or a Javascript canvas element, and no other GUI components. For example, Java clients should not create the board using JButtons or other Swing components. JS clients should not use HTML elements (divs, tables, etc.). Instead, draw the board using either the Java2D Graphics2D object or the CanvasRenderingContext2D (using lines, rectangles, and images). The provided code has a simple Java example.

As the client program, I want to visualize the gameboard with a canvas-like component, so that I can display the game to the player.

Users must be able to mark cells as empty (using a dot or other similar notation), mark stars, and clear cells.

As a user, I want to mark the cells we think are empty by right-clicking a square.

As a user, I want to mark the cells with a star, by left-clicking on it.

As a user, I want to clear a cell, by left or right-clicking a previously marked square.

Dots may be added automatically or manually, depending on the users' choice. The user may choose via some UI element.

As a user, I want to have a toggleable setting, to choose if dots are marked automatically. This setting should persist between levels and restart the program.

The graphical presentation is up to you. (For example, you could indicate regions with background colors instead of outlines, use smiley faces instead of stars, etc.)

As a user, I would like an easy-to-understand visual representation of the game, so that I can follow along and play the game.

No "login" page is required. Instead, users will identify themselves via a single UI element or other technique. A separate team manages authentication.

As a user, I want to be able to identify myself amongst other players so that I can save my progress.

The client may determine if the game is solved on its own, or it may ask the server. Regardless, the user should be notified immediately after a winning move is made with a celebratory animation or congratulatory message.

As a user, I want to be alerted after placing the winning move, so that I can feel that I made an achievement.

As a user, when I place the winning move, I want to see my final time, so that I can feel that I made an achievement.

As a user, when I place the winning move, I want to see my award progress, so I can feel I made an achievement.

If a user places a star in a place that is invalid, the user should be notified in some way (for example, by coloring the star red).

As a user, I want to be notified when I place a star in an invalid cell so that I do not make the wrong moves.

A user should be able to see statistics about their play including max/min/average solve time and the number of puzzles solved.

As a user, I want to be able to see statistics about my max/min/average solve time, so that I can understand my play and skill.

As a user, I want to be able to see a statistic about the number of puzzles solved, so that I can understand my play and skill.

To help increase engagement and competition, users should be able to see a list of the top players by the number of puzzles solved.

As a user, I want to be able to see a list of top players by the number of puzzles solved, so that I can feel competitive and engaged.

When working on a puzzle, the user should be able to see how many other players have completed the puzzle.

As a user, when working on a puzzle, I want to be able to see how many other plays have completed the same puzzle, so that I can satisfy my curiosity.

To help increase engagement, users should be awarded prizes for the number of problems solved. For example, you might give a user the title of "novice" when 0-10 puzzles have been solved, and then give other titles such as "intermediate", "advanced", "expert", "or guru", as the user solves more puzzles.

As a user, I want to be awarded titles for the number of puzzles solved, so that I can feel engaged and proud.