

Spot the Differences Game - Design & Development Plan

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1. Introduction

1.1 Project Overview

This project is a browser-based Spot the Differences game, where players compare two nearly identical images and identify five differences per level. The game is designed for a casual audience, offering a relaxed yet engaging experience with no time pressure. Players can use hints to reveal difficult differences, and sound effects provide interactive feedback.

1.2 Background Context

Spot-the-difference games have been a staple of casual entertainment, appearing in puzzle books, newspapers, and digital platforms. Online versions, such as those found on CrazyGames and Hidden Folks, typically include timers or limited attempts. However, this project prioritizes a stress-free gameplay experience by eliminating time constraints and penalties, making it suitable for all ages.

Players will be provided with three hints per level, and no additional hints can be earned. Correctly identified differences remain permanently marked, ensuring clarity in progression.

The game will feature 15-20 image sets, starting with easier levels and increasing in complexity. The game will be designed using HTML, CSS, and JavaScript for a smooth and interactive experience.

2. Background Research & Technology Choices

2.1 Research into Similar Games

CrazyGames & Other Online Puzzle Platforms: Many games in this genre emphasize time-based challenges or ad-based hint systems.

However, these mechanics can lead to player frustration. To improve the user experience, this game removes the time constraint and focuses purely on discovery and enjoyment.

2.2 Technology Stack

- **HTML & CSS:** For structuring and styling the game interface.

- JavaScript: Handles game logic, including detecting differences, hint functionality, and progression between levels.
- Canvas API: Used for drawing circles over identified differences.
- Local Storage: Potential for storing progress and user preferences (sound/music settings).
- Audio API: Enables sound effects for correct and incorrect clicks.

3. Game Features

3.1 Core Features

1. Find-the-Difference Gameplay

- Players compare two images and click on the differences.
- Correct clicks are highlighted and remain permanently marked.
- Incorrect clicks play a sound effect but do not impose penalties.

2. Hint System

- Players have 3 hints per level.
- Clicking the hint button causes a dotted circle to appear over a difference for a short time.
- No additional hints can be earned.

3. Sound Effects & Music

- Correct clicks trigger a success sound.
- Incorrect clicks trigger an error sound.
- Players can toggle sound and background music on/off.
- Music does not play by default but can be enabled, with 3 random background tracks available.

4. Victory & Next-Level Progression

- Players move to the next level after finding all differences.
- Players advance through 15-20 sets of images, starting with easier differences.
- A message appears: "You found all differences!" followed by a Next Level button.
- No penalties for incorrect guesses; players can continue until they complete the level.
- Once all differences are found, a pop-up message appears.
- Clicking "OK" reveals the "Next" button to proceed.

5. Navigation & UI

- Top Navigation Bar includes:
 - Differences Left (X/X)
 - Hints Left (X/3)
 - Hint Button
 - Sound On/Off Button
 - Music On/Off Button
- Plain white background to minimize distractions.

6. Landing Page & Additional Sections

- Home Page with navigation to: About, How to Play, FAQ, and Contact.

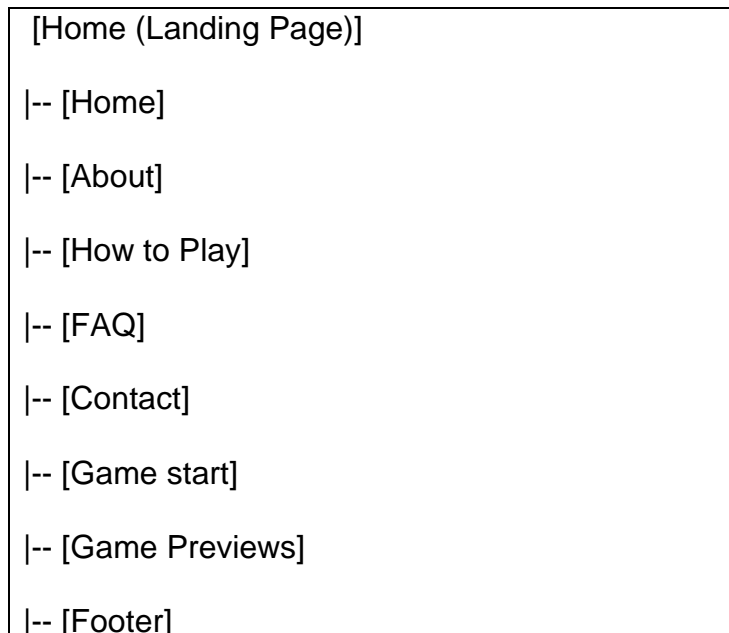
- Game Previews on the home page showcasing sample levels.
- Clicking on the game logo or Home button brings players back to the homepage.

4. Site Structure & Navigation

4.1 Site Pages

- Home Page: Logo, Navigation menu, Start Game button, Game preview gallery, Footer
- About Page: Explanation of the game's purpose and background.
- How to Play: Step-by-step instructions.
- FAQ Page: Answers common gameplay questions.
- Contact Page: Developer information and email.
- Game Page: Core game experience with interactive image comparisons.

4.2 Navigation Diagram



5. UI Design Motivation

5.1 User-Friendly Interface

1. Simple and Intuitive Navigation

- The navigation bar ensures users can easily access all sections.
- The How to Play page provides clear instructions to prevent confusion.

2. Image Gallery for Engagement

- Displays sample game images on the home page to give players a visual preview.
- Encourages curiosity and interaction before starting the game.

5.2 Home Page and Game Page mock-up

Label


Spot the differences

Home	About	How to play?	FAQ	Contact
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START GAME button


Game Previews

Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nunc maximus, nulla ut commodo saaittis, sapien dui mattis dui. non pulvinar lorem




Feature

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Feature

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Feature

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Label

Spot the differences

Differences: x/x

Hints: x/x

Hints button

Sound on/off button

Music on/off button

Image1

Image2

Next

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6. Project Plan

6.1 Roadmap

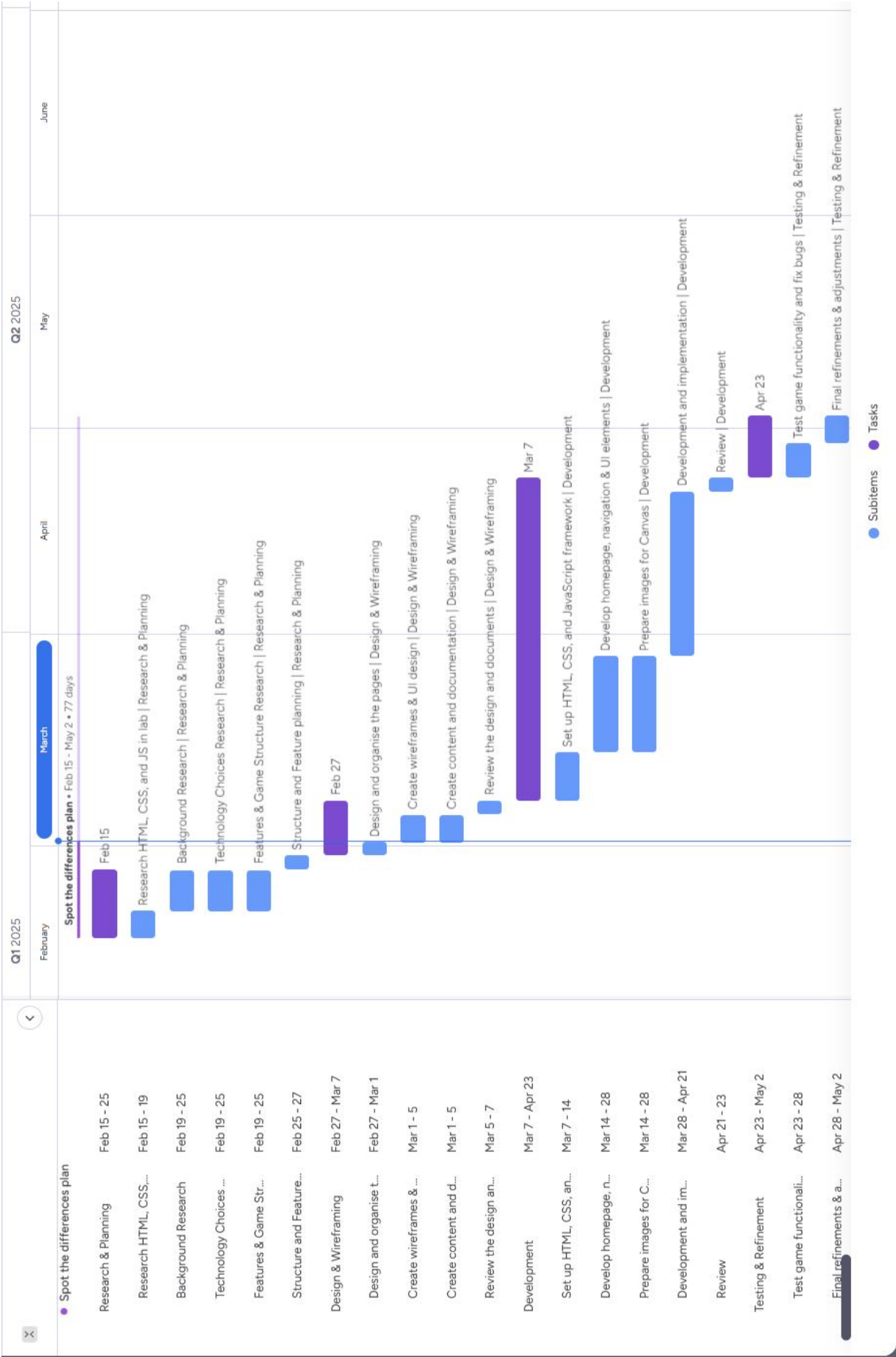
Phase 1 – Research and Planning (Including Webpage and Game research)

Phase 2 – Design & Wireframing (Including pages and contents)

Phase 3 – Development (Including pages, images preparation and implementation)

Phase 4 – Testing & Refinement (Including functionality test and adjustment)

6.2 Gantt Chart



7. Additional Features extension

7.1 Dark mode

To improve accessibility and user comfort, a Dark Mode option will be in consideration. This feature allows players to toggle between light and dark themes, reducing eye strain, especially in low-light environments and for accessibility.

The Dark Mode toggle button will be placed in the navigation bar, enabling players to switch modes easily. The game will remember the user's preference using local storage, so their chosen theme remains active when they revisit the site.

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