Scene 1: Main page



Description

The starting screen welcomes the user and shows the game title. Users are prompted to click the "Play" button to proceed to the next screen and "Exit" button to end the game.

Multimedia Elements:

T(Text), B(Button), G(Graphic), A(Animation)

T1: Game title text

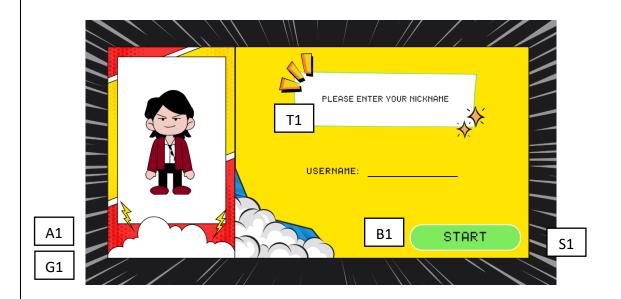
B1: Play button - Navigates to the nickname entry screen

B2: Exit button – Exit the game

G1: Themed background graphic

A1: Subtle animated effects in the background to keep users engaged

Scene 2: Profile page



Description

This screen allows users to personalize their gameplay experience by entering a nickname. It adds user identity to the session and prepares them for the main game interface.

Multimedia Elements:

T(Text), B(Button), G(Graphic), A(Animation)

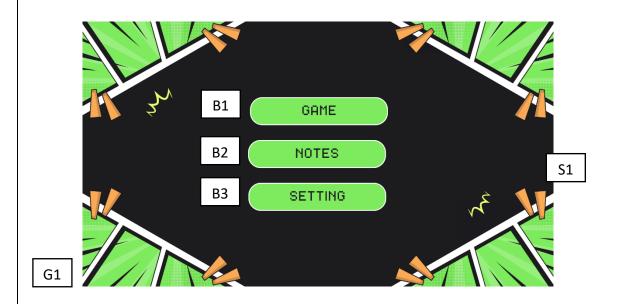
T1: Instructional text guiding the user to input a nickname.

B1: "Start" button to confirm and proceed.

G1: Profile player page

A1: Character animations

Scene 3: Menu page



Description

This screen serves as the central navigation hub for the entire game. After entering a nickname or returning from a module, the user arrives here. From this menu, players can choose to start the game, review notes, or adjust settings. Each button is clearly labeled and visually distinct to ensure easy navigation. The design is clean and consistent with the overall visual theme.

Multimedia Elements:

B(Button), G(Graphic)

B1: Game button – Navigates to the game selection screen

B2: Notes button – Opens the educational notes screen

B3: Settings button – Opens the settings page

G1: Background that follow the theme

Scene 4: Game Menu



Description

This screen acts as the main hub for game modes. Players can choose from four different educational mini-games: Binary Hero, Drag and Drop, Colour Shoot, and Quiz. Each button is visually distinct with icons or thumbnails that give a preview of the gameplay. Players can freely select the order they want to play.

Multimedia Elements:

T (Text), B (Button), G (Graphic), A (Animation)

T1: Title text for each game mode

B1: Binary Hero button – Opens the binary conversion game

B2: Drag and Drop button – Opens the analog vs. digital sorting game

B3: Colour Shoot button – Opens the RGB color recognition game

B4: Quiz button – Opens the multiple-choice quiz

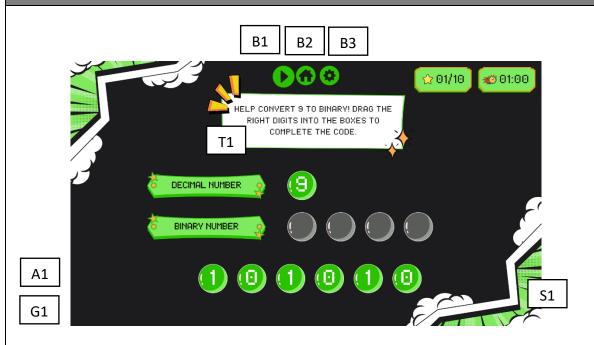
B5: Home button

B6: Setting button

G1: Game icons or thumbnails showing visual hints of each game

A1: Button animations on hover and selection

Scene 5: Binary Hero



Description

This mini-game focuses on converting decimal numbers into binary. A decimal number is shown (e.g., 9), and players must drag the correct binary digits (0 or 1) into the empty boxes in the correct order. The drag-and-drop mechanism is intuitive, and visual feedback is provided when players complete the sequence correctly or incorrectly.

Multimedia Elements:

T (Text), B (Button), G (Graphic), A (Animation)

T1: Instruction text

G1: Binary boxes and digits (0, 1)

B1: Pause button

B2: Home button

B3: Setting button

A1: Drag-and-drop animation

Scene 6: Drag and drop



Description

Players are shown various real-world items (e.g., cassette tape, digital clock) and must drag each into the correct category: Analog or Digital. The scene helps reinforce the difference between analog and digital technology. Once all items are sorted, the player clicks a button to submit their choices.

Multimedia Elements:

T (Text), B (Button), G (Graphic), A (Animation)

T1: Digital text

T2: Analog text

G1: Images of analog and digital items

B1: Pause button

B2: Home button

B3: Setting button

A1: Drag-and-drop animation for sorting items into labeled boxes

Scene 7: Colour Shoot B1 B2 B3 AIM AND SHOOT THE CORRECT BALLOON BASED ON ITS ROB VALUE. HIT THE TARGET TO SCORE POINTS! T1 S2 A1

Description

G1

In this game, balloons with different colors float across the screen. The player is shown an RGB color value (e.g., RGB(255, 0, 0)), and must aim and shoot the correct balloon that matches the color. This helps players learn to associate RGB values with actual color appearances.

Multimedia Elements:

T (Text), B (Button), G (Graphic), A (Animation), S (Sound)

T1: Instruction text – Displays the RGB value the player must match

G1: Balloons in various colors

B1: Pause button

B2: Home button

B3: Setting button

B4: Shoot button – Launches the projectile toward the balloon

A1: Shooting, explosion, and color-match animations

S1: Background music and sound effect

S2: Shooting sound and pop sound when balloon is hit

B1 B2 B3 TOTAL QUESTIONS: 10 QUESTIONS TIME TO ANSWER EACH QUESTION: 30 SECONDS TOTAL CORRECT ANSWER: 1 POINTS START B4 START

Description

Before starting the quiz, players are shown the rules. This includes how much time is allowed per question, how scoring works, and the total number of questions. This prepares players mentally for the pace and structure of the quiz.

Multimedia Elements:

T (Text), B (Button), G (Graphic), A (Animation)

T1: Rule explanation text – Time limit, point system, total questions

G1: Background following the theme

B1: Pause button

B2: Home button

B3: Setting button

B4: Start Quiz button – Begins the quiz timer and opens the first question

A1: Animated countdown timer or rule icons

Scene 9: Quiz



Description

Each quiz screen presents one multiple-choice question with three answer choices. A countdown timer limits the response time to 30 seconds. When the user selects an answer, the system gives immediate feedback through animations or color cues.

Multimedia Elements:

T (Text), B (Button), G (Graphic), A (Animation)

T1: Question text – A multimedia-related question

B1: Option A button – First answer choice

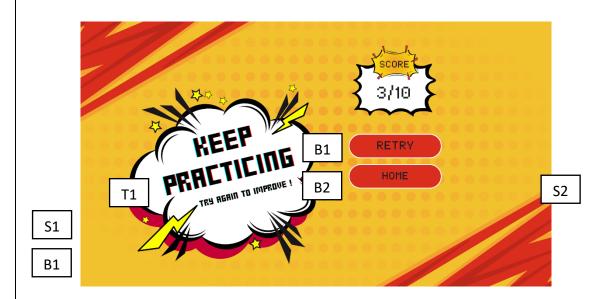
B2: Option B button – Second answer choice

B3: Option C button – Third answer choice

G1: Suitable Background

A1: Feedback animations – Green for correct, red for wrong, with a sound cue

Scene 10: Win page



Description

At the end of the quiz or mini-games, the system displays the user's score. If the score is high, the screen shows positive reinforcement with visual and audio effects. Encouraging phrases like "Excellent Work!" motivate the player.

Multimedia Elements:

T (Text), B (Button), G (Graphic), A (Animation), S (Sound)

T1: Feedback text – Positive message

G1: Score display

B1: Retry button – Replay the game or quiz

B2: Home button – Return to main menu

S1: Background music and sound effect

S2: Victory sound effect

Scene 11: Loose page



Description

If the player scores low, the screen provides a gentle message encouraging improvement. The layout is similar to the high score screen but uses calmer visuals and motivational phrases like "Try again to improve!"

Multimedia Elements:

T (Text), B (Button), G (Graphic), A (Animation), S (Sound)

T1: Feedback text – Encouragement message

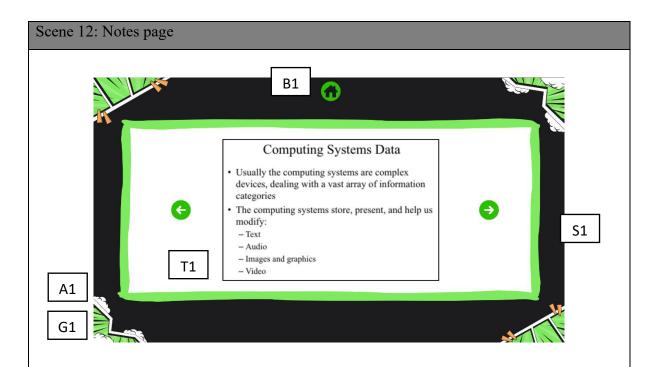
G1: Score display

B1: Retry button – Try the game again

B2: Home button – Return to main menu

S1: Background music and sound effect

S2: Calm retry sound



Description

This screen provides educational notes or key points related to multimedia design and development. It is intended to help users review important concepts before or after gameplay. The notes may include summaries, definitions, examples, or diagrams to reinforce learning. This acts as a study aid or quick reference.

Multimedia Elements:

T (Text), B (Button), G (Graphic), A (Animation)

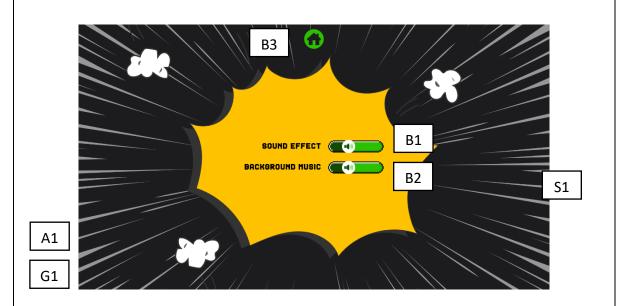
T1: Informational text – Displays important notes and concepts

B1: Home button – Returns the user to the main menu

A1: Slide-in/slide-out transition when entering or exiting the page

G1: Backgroound of visual representations of concepts

Scene 13: Setting page



Description

The settings page allows players to customize their audio preferences. They can toggle background music and sound effects on or off. This helps users control their experience based on personal preference or environment

Multimedia Elements:

T (Text), B (Button), G (Graphic), A (Animation)

B1: Home button – Returns the user to the main menu

B2: Toggle button for background music

B3: Toggle button for sound effects

G1: Background that follow the theme

A1: Toggle switch animation – Smooth sliding effect between ON and OFF