

So, the deep-space mission could be going better — instead of soaring through nebulae and tracking comets, sending valuable data to your people, you've crash-landed on a planet in some distant galaxy, with aid months if not years away. It could have been worse, though, considering the data you have on the local climate, resources, and species — as inhospitable as this environment is, you should be able to make it on Terra, a.k.a. "Earth". You've been able to set up a base until you can get help or leave, and there is a small native settlement nearby where you can find necessary resources and information, but one last hurdle remains — you don't speak the language.

Sputnik is a life simulation game designed to teach conversational Russian to English speakers through language immersion and replicating practical experience. Players will learn and practice essential communication skills while adapting to their new surroundings and forming relationships with the people of Earth.

- Game Spec Overview
 - Game Engine: Unity 2022.1.10f1
 - Controller: Mouse and keyboard
 - Game Type: 1st person dialogue-driven adventure/conversation simulator, with survival and open world elements
 - Genre: Space western, urban sci-fi, magical realism
 - Mood: Bleak but hopeful, emphasis on perseverance, growth, and coming together.
 - Art Style: Stylized realism realistic proportions and design with stylized details (e.g. The Long Dark)
 - Music/SFX Style: Low-key, realistic sound effects. Music takes cues from Russian music history, with traditional and classical inspirations in town sections and modern industrial influence for the home base and exploration.



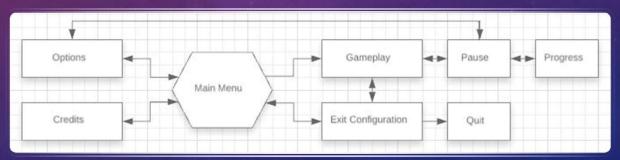


- Menus & Sub-Menus Interface Map & Flow
 - Summary

The UI is almost entirely diegetic, displayed on the player character's pod screens, cybernetic implants, or other in-universe means, only breaking this conceit to address out-of-universe needs such as game settings. The design of the alien technology should be futuristic but practical, putting function over style, and will show signs of damage – flickering, cracks, etc. (but not so much as to be distracting).

The UI should prioritize function and supporting the gameplay over being flashy in and of itself- animations and sound effects should be smooth but not distracting, menus should be as clear and direct as possible, etc.

Interface Map & Flow



Market Research 1 – Duolingo

As a popular platform for gamified language learning (and being heavily UI driven), Duolingo is a starting point for developing an effective educational experience. The app clearly lays out skills and goals to reach, using positive feedback and rewards to keep players engaged. While Duolingo's aesthetic trappings may not fit this game's intent, the underlying systems of organization and feedback can be adapted to effectively encourage learning.





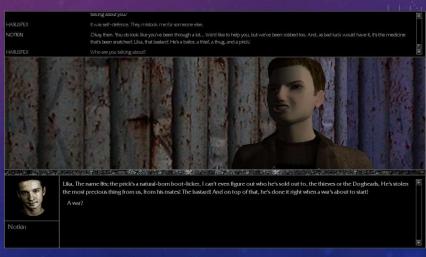
- Market Research 1 Duolingo
- PROS
 - Use of symbols and animation to reinforce verbal instruction
 - Goals, skill types, and progress are clearly displayed and understood
 - Multiple modes of rewarding feedback (visual, auditory, character responses, etc.)
- CONS
 - Little immersive experience or impact, focus on extrinsic over intrinsic reward
 - Inconsistent/unclear signifiers and feedback (skill symbols, lessons per level, point rewards, error threshold)
 - Animations can lock players out of interactions in frustrating ways



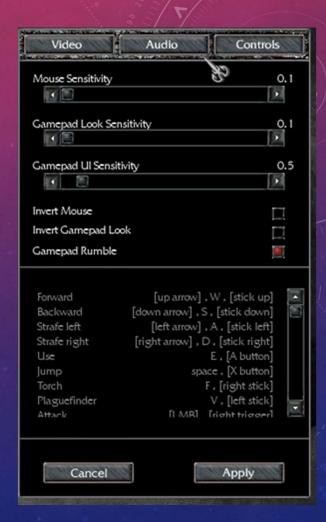
• Market Research 2 – Pathologic

Pathologic is a key inspiration for Sputnik in its atmosphere, survival, and conversation elements, and how it facilitates these interactions with a clean, unobtrusive UI. Simple yet distinctive layouts convey necessary information while framing the action and world of the game, supporting the player's engagement with the constant movement and intensity of the Steppe (and also, it's Russian!)





- Market Research 2 Pathologic
- PROS
 - Informative, but unobtrusive –only the necessary information is conveyed
 - Layouts are clear and readable while fitting the tone of events
 - Multiple forms of interaction and information displays match the needs of each mechanic
- CONS
 - Occasional buried or poorly signified menus or abilities
 - Non-diegetic, feeling somewhat disconnected from the world and events
 - Minimal feedback can make menus frustrating to use



Market Research 3 – Fallout: New Vegas

The Fallout series is another survival game with conversational elements, this one with a greater focus on diegesis, integrating the UI into the world through a consistent visual style. The highly stylized HUD and menus flow into the world and gameplay to enhance players' experiences in the wasteland.

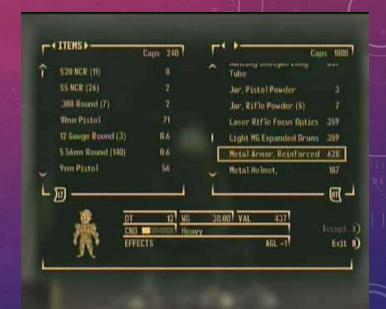




- Market Research 3 Fallout: New Vegas
- PROS
 - Emphasis on immersive, semi-diegetic UI elements fleshes out the setting and gives players presence in the world
 - Balance of futurism and grittiness, aesthetically integrated into the universe
 - Strong, simple feedback and interaction responses reinforce player action

CONS

- Stylistic elements of the UI/diegesis take up space and attention
- Transparent or text-heavy menus and UI elements can be difficult to read
- On occasion, useful information (time, stats, etc.) can be difficult to find between submenus



Title Screen/Main Menu – Asymmetrical, Hub & Spoke

The main menu is displayed on the primary viewscreen of the player's stasis pod. It's taken a beating – the screen is cracked and flickering, and parts are haphazardly taped or welded together – but it works for their purposes. As players play more of the game, elements of their pod and home base (the screen displays, shed amenities, etc.) will change based on the player's progress and interactions with the world, reflecting the state and tone of their current situation as they adapt to life on Earth.

As a session starts, the player wakes up in their pod to see the screen before them, immediately immersing them in their situation. The left of the screen displays the menu options panel, while the right displays information about the current state of the world – snapshots of outside, weather updates, etc. (all in Russian, skimmed by the pod from local communication services) – giving hints to players about the session ahead. Once the game begins, the pod opens and the player enters the game proper.

• Title Screen



Golden Path



El Schaefer Des 365 Spring 2022 - A - Curriculum © 2022 DigiPen Institute of Technology

Options Screen

The options menu appears as a separate viewscreen, which the player turns to face. It is aesthetically and interactively similar to the main menu.

- Option #1 Language: Dropdown menu which allows players to choose whether they want their UI/menus/other support text in English, or all text in Russian
- Option #2 Music Volume: Radial dial controls the volume of background music
- Option #3 SFX Volume: Radial dial controls the volume of sound effects
- Option #4 Mouse Sensitivity: Bar slider with separate percentage display, controls mouse sensitivity
- Option #5 Graphics: Dropdown menu which allows players to choose high, medium, or low fidelity



• Options Screen (ASF Chart)

OPTIONS Function	Affordance	Signifier	Feedback
On Open	Button on main menu, can be selected to open options.	Button on main menu. Changes color on hover.	Player rotates to face options on click.
Language Immersion	Selectable box, produces a dropdown menu with language options.	Current selection displayed in box. Down arrow in box. Color change on hover.	Dropdown appears on click. Options highlighted on hover. Display language changes on alteration
Music Volume	Elongated triangular dial. + on the right, - on the left. Alters volume of music.	Point of triangle indicates value. Number value displayed below dial. + and – indicate directions.	Slider changes color on hover. Music volume and displayed number change value.
SFX Volume	Elongated triangular dial. + on the right, - on the left. Alters volume of music.	Point of triangle indicates value. Number value displayed below dial. + and – indicate directions.	Slider changes color on hover. SFX volume and displayed number change value.
Mouse Sensitivity	Linear slider with slidable peg. + on the right, - on the left. Alters sensitivity of mouse movements	Decimal value displayed to the right of slider bar. + and – indicate directions.	Peg changes color on hover and click. Value display changes on slide.
Graphics	<u>Selectable box</u> , produces a dropdown menu with graphical options. Fidelity sample below.	Current selection displayed in box. Down arrow in box. Color change on hover.	Dropdown appears on click. Options highlighted on hover. Fidelity sample changes on alteration.
On Close	Close button on window. Can be selected to close the window.	Button in lower corner of window with saying "Back". Changes color on hover.	Player turns back to main menu on click.

Credits Screen

Like the options menu, the credits are a separate viewscreen. Players may scroll through the credits themselves or allow them to auto-scroll, or exit the menu

Credits (subject to change if necessary)

Designer: El Schaefer Instructor: Eric Cagle

DigiPen President: Claude Comair

Technical Assistance: Mark Esparagoza, Grant Garoutte,

James Madsen, Asher Robertson

Sound: YouTube Audio Library (https://bit.ly/3kvTfGA),

Dan Henig, Tracktribe

Images: Wikimedia Commons (https://bit.ly/3zBTNPA),

OnlyGFX (https://bit.ly/3FRYWqN)



• Credits Screen (ASF Chart)

CREDITS Function	Affordance	Signifier	Feedback
On Open	Button on main menu. Can be selected to open credits.	Button on main menu. Changes color on hover.	Player rotates to face credits on click.
Scrolling	Credits are scrollable to see all information.	Credits scroll automatically. Window is interactable.	Credits scroll based on player interaction.
On Close	Close button on window. Can be selected to close the window.	Button in lower corner of window with saying "Back". Changes color on hover.	Player turns back to main menu on click.

Start Game

Upon selecting the Start option from the main menu, the menu screen slides away with the opening pod door, letting the player into the abandoned shed where they make their base and begin play. The shed's appearance and furnishings will change based on the current state of gameplay, items the player has acquired, etc.

• Start Screen (ASF Chart)

START Function	Affordance	Signifier	Feedback
On Start	Start button on main menu. Can be pressed to begin gameplay.	Button is labeled Start and is both the largest and at the top of the list. Changes color on hover.	Menu slides away with animation and sound of pod opening. Player is released into gameplay.

Exit Game

The exit menu can be accessed either from the main menu, which will turn players to the back of the pod, or from gameplay by stepping into the pod. At the back of the pod is a panel where they can choose whether to exit ("Enter Stasis Mode?") or keep playing. If confirmed, the game fades out before exiting.



• Exit Screen (ASF Chart)

EXIT Function	Affordance	Signifier	Feedback
Exit Button	Button on main menu. Can be used to start the end game sequence.	Button on main menu. Changes color on hover.	Player rotates to face CODA on click.
Back Button	Button on CoDA window. Returns player to the main menu.	Button is labeled NO - CONTINUE. Changes color on hover.	Player turns back to main menu on click.
Confirmation	Button on CoDA window. Exits the game.	Button is labeled YES - QUIT. Changes color on hover.	Particle effect and sound. Visuals and sounds fade out on click. Application closes.

Pause Game

The pause menu can be activated during gameplay, taking the form of a popup in the player's cybernetic display. Note that "pause menu" may be something of a misnomer, as actions going on around the player won't stop — they're stepping aside, not stopping the world around them, adding to the sense of living reality, change, and pressure. From this holographic display, players may resume gameplay, check their progress web, adjust their options (in a menu similar to that in the pod), or teleport back to their base camp if they don't want to walk back manually.



• Pause Screen (ASF Chart)

PAUSE Function	Affordance	Signifier	Feedback
Continue	Button on pause menu. Can be used to reenter active gameplay.	Labeled button. Changes color on hover.	Pause window closes on click.
Skill Web	Button on pause menu. Can be selected to open progress display.	Labeled button. Changes color on hover.	Skill web window opens on click.
Settings	Button on pause menu. Can be selected to open options window.	Labeled button. Changes color on hover.	Settings window opens on click.
Return Home	Button on pause menu. Can be used to start return sequence.	Labeled button. Changes color on hover.	Return confirmation window opens on click.

Skill Web

As the player plays the game, doing activities and picking up the language, their progress will be displayed in a growing skill web, which they can access from their pause menu. Players can click on the different nodes of the web to see how each skill is progressing and connects to other skills.



• Skill Web(ASF Chart)

SKILL WEB	Affordance	Signifier	Feedback
Inspect Node	Button at web intersections representing language skills. Can be selected to display progress at specific skill.	Changes color on hover.	Progress display appears below.
Back button	Button on web window. Returns to pause menu.	Button in lower corner of window with saying "Back". Changes color on hover.	Web window closes, pause window opens.

