

Space-Time Vertex Pre-Research

1. This product will be a space/time transportation device. It will reside outside of regular space-time, and will be accessed via smartphone app or other wireless devices. Using the app, users will be able to select visually, using ethereal cameras projected from the ship, who will be ported into the ship. The ship itself will have no apparent outside, since it resides outside of spacetime and users will only see the inside. The inside will be a half circle with the round side up, with seats around the outside. The center will contain a panel with screens and controls to change the projection location. The panel will respond to voice commands, like "London 1967", in which case it will bring up a "real time" overview of the city, frozen at that point in time. Users will be able to use the touch screen and voice commands to navigate to their desired projection location, and select the exact location they want to project into. Using favorited space-time locations, users should be able to navigate to and from locations only using the app, in which case the ship will do a sanity check to make sure timeline alterations have not made the location uninhabitable, and will then prompt the user with the location info to make sure they really want to project there.
2. In order to find the requirements for this project, we did focus groups, which all returned that the project would be "fricken awesome" [sic]. With that information, we decided to move forward with the project.

Space-Time Vertex FSD

Product: Space-Time Vertex

Version: 1.0

Company: Infinity Interactive

Purpose

This device will allow users to go anywhere in space or time, for exploration and recreational purposes.

Product Description

App Control - See Figure A

- The app key will feature a visual interface that shows the user a floating camera image of the near space, that they can move around using arrow buttons below the camera image .
- The user can press on the touch screen to select and deselect people that should be boarding the vehicle.
- The app should also have a button that will port the selected people into the ship when pressed.
 - There should be some confirmation command after this is pressed to verify the selection.

Ship Interior - Figure B

- The ship will have no apparent outside to the user, since it will reside outside regular-space time and users will be ported directly inside and out of it to their desired locations.
- The interior will be a circular dome, roughly 40 feet in diameter.
- The outside will have seats for the occupants.
- The interior will feature the control panels, and touch screens for controlling the projection location.
- The central control panels will be three sets of touch screens and controls, arranged in a triangle with the interfaces pointing outwards.

Projection Interface, Control Panel

- The control panel will have controls for manipulating all the projections location's time, as well as for modifying the direction of the view portal.
- There will be a dial for modifying the time, that will increase the time change interval based on rotation speed.
- There will be two joysticks for modifying viewport direction and location.

- The left joystick will modify movement, with the y axis of the joystick modifying the z axis of the view portal, the x axis modifying the x axis, and two buttons on the front of the joystick modifying the portals y axis.
 - All portal axes are relative to the view portals current direction.
- The right joystick will modify the direction of the viewport.
 - Both axes map directly from the joystick to the viewport.
- The right joystick should also contain a trigger that toggles a projection location in the view port.
- There will be a keyboard for entering any text needed.
- The control panel will have a button for engaging the selected projections.

Projection Interface, Touch Screens

- The touch screens will display the view port.
- Touches on the screen should either zoom, or toggle projection locations.
 - This depends on the distance to the object. Pressing on any destination greater than 100 feet away should zoom/move to that location, otherwise the toggle action will happen.
- The touch screen will have a recent location list, as well as a search bar.
- The search bar should handle many types of location specifications.
 - If just a time is given, the location should stay the same.
 - If just a location is give, the time should stay the same.
 - Galaxy specifications.
 - Solar System specifications.
 - Planetary specifications.
 - Country Specifications
 - City Specifications
 - State/Providence Specifications
 - Address Specifications
 - Arbitrary Alien Zone Level Specifications
 - Any ambiguous occurrences should always prioritize things within the closest detail levels.
- When a location is entered from the search bar, it should produce a list of the most likely destinations in order.
- Voice commands should simply translate spoken text to search queries.
- When a location is navigated to logically (through the search list), it should move the viewport to the location that produces the most detailed view possible, while containing the whole location visually.
 - If the location is flat, or wraps less than 180 degrees, it should be seen from above.
 - If the location if round like a planet, it should choose an arbitrary point along the hemisphere if it has one.

- If it doesn't have a hemisphere, any location can be chosen.
- The scene shown in the viewport should support a frozen time or relative time mode.
 - It could optionally include scaled time views.
 - When projection locations are selected (more than 0), frozen time mode should be enforced
- Projection locations should be shown to the user visually with a wireframe of their body at the location.
- When the users decide to project into their chosen locations, the machine should do a sanity check to make sure the location is safe, and report back its conclusions. It should then verify that the users want to project to those locations.

Figure A - Key App



Figure B - Ship Interior

