Virtual Solar System

3D online-platform

GMU: Space Is The Place

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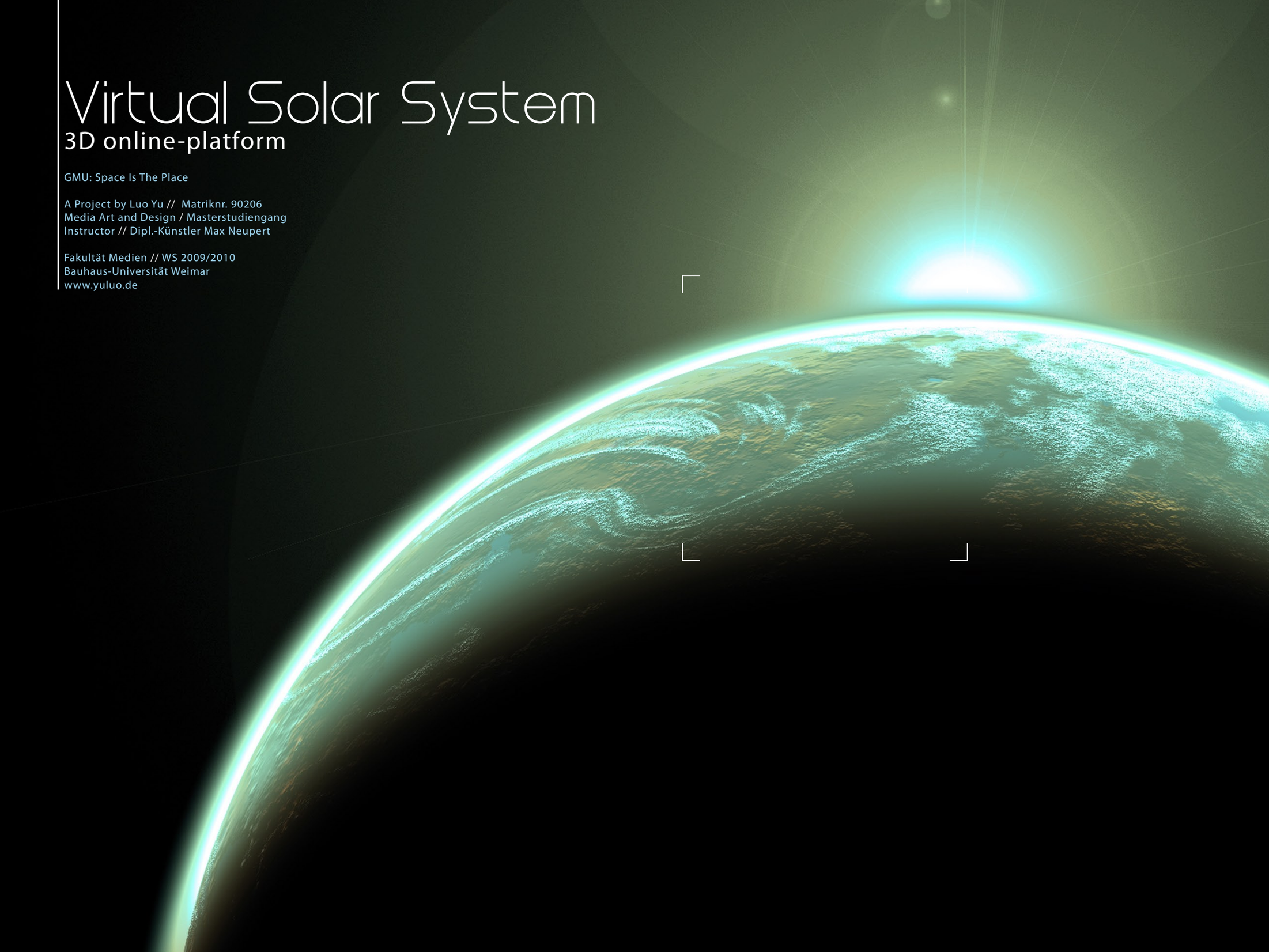
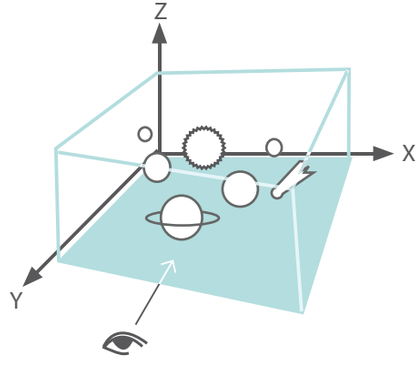
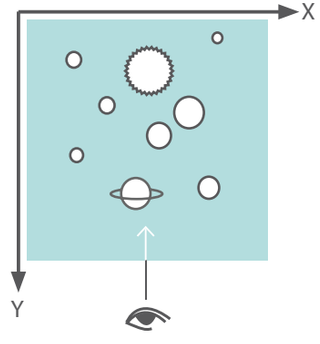


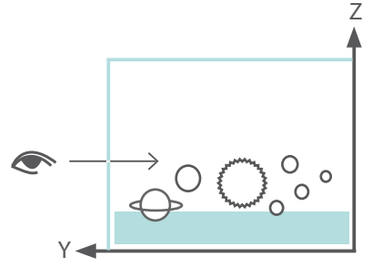
Ideation

The Virtual Solar System will be an innovative 3D online platform. Through this you will not only learn the structure and context of the solar system, but also a fantastic space that can be experienced through simple interactive body movements.

The Idea ist that I would like to make a simulation for the solar system, the initial idea is to use flash platform with ActionScript programming that I design a virtual mini-universe and will make this space into a virtual online exhibition, people will be able to accessthis place through the network.



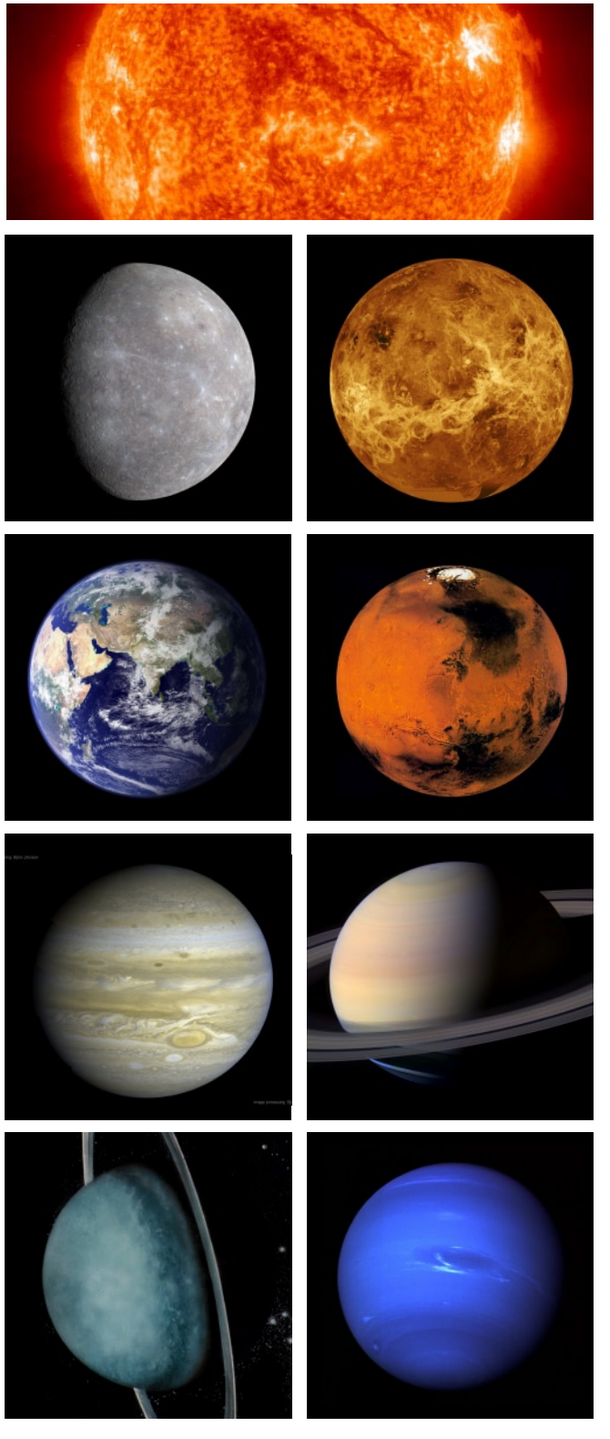




Materials

The overall style is realistic and I try to restore the original appearance of the solar system, that is, the end result will reach a realistic sense of sci-fi atmosphere.

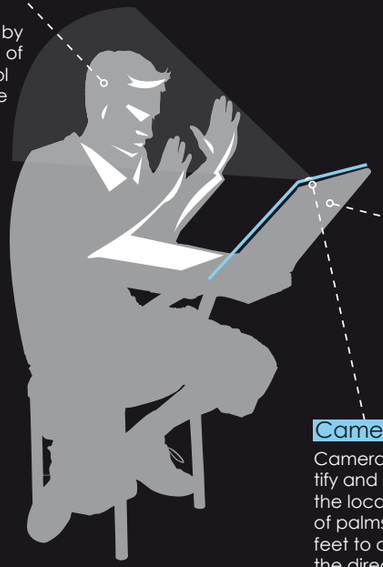
In order to get a good picture material, all images materials are from NASA, I had processed these images to achieve the results I need.



Schematic

Normal Mode

Move your hands in front of the camera by a computer Instead of the mouse to control the position in space and the platform.



Screen

Camera

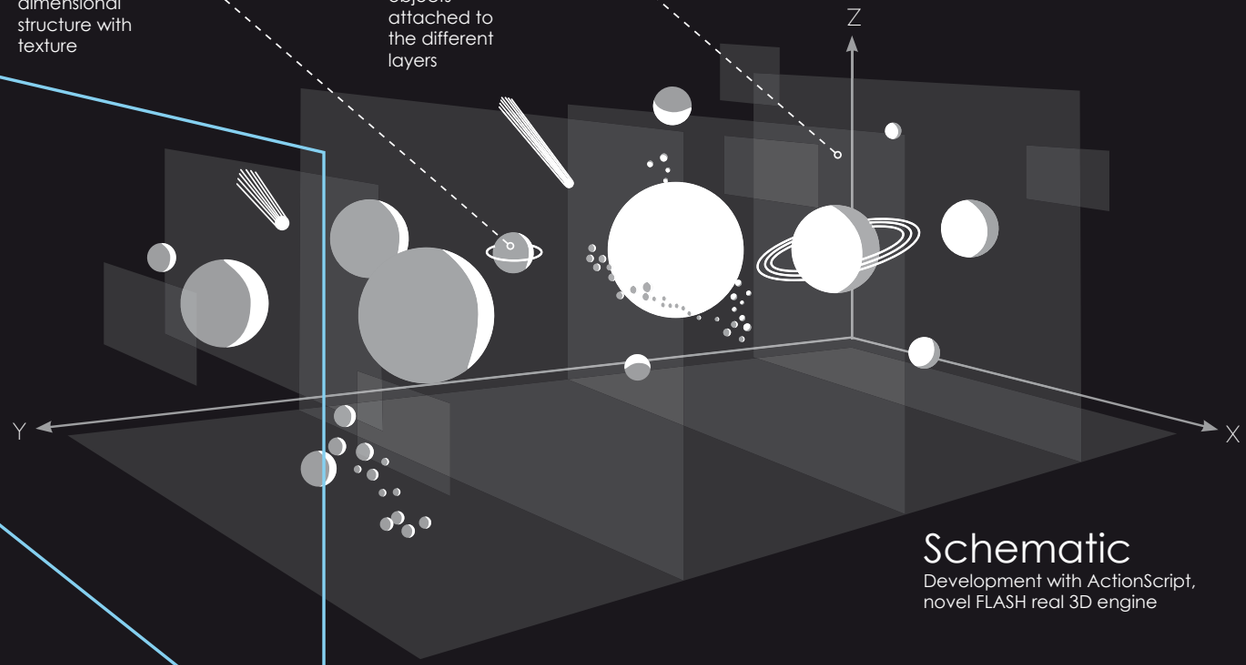
Camera identify and record the location of palms and feet to control the direction

3D Objects

All planets are three-dimensional structure with texture

2D Objects

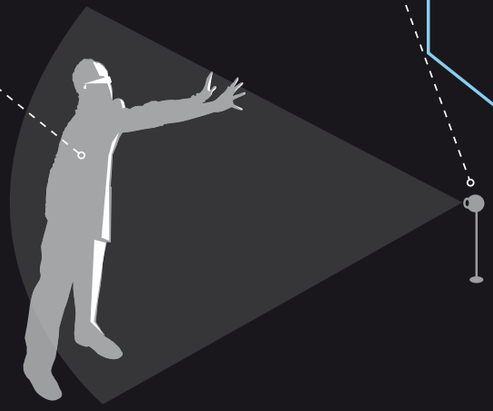
All nebulaes, galaxies and other non-figurative objects attached to the different layers



Astronaut Mode

Move the body in front of the projector to control the position in space. Different positions (hands and feet co-ordination) will be able to achieve different functions.

Amazing experiences with 3D glasses



Schematic

Development with ActionScript, novel FLASH real 3D engine

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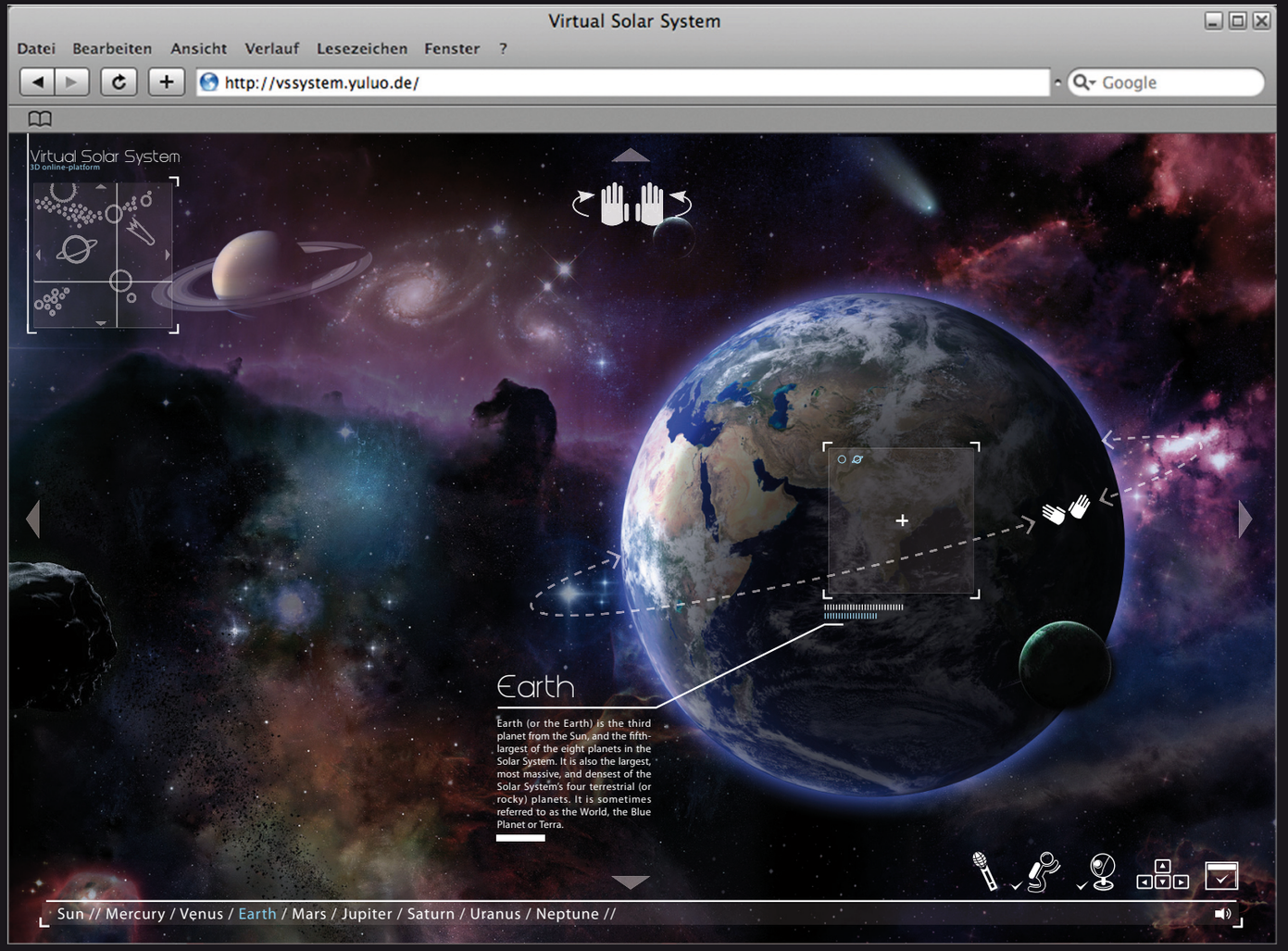
Normal Mode

In this mode you can move in front of the screen free by own hands and feet in order to feel the spectacular of the spacewalk.



Explore Functionality // Explore the solar system

Multi-User Functionality

With Multi-User Functionality each user even is able to set up their own celestial bodies and share online. And let other users see your planet!

Multi-User Functionality

Astronaut Mode

Once the system has found a projector connection, this platform is switched into the “astronaut mode”, in this mode you can move in front of the screen free by own hands and feet in order to feel the spectacular of the spacewalk.

Astronaut Mode

Move the body in front of the projector to control the position in space. Different positions (hands and feet co-ordination) will be able to achieve different functions.

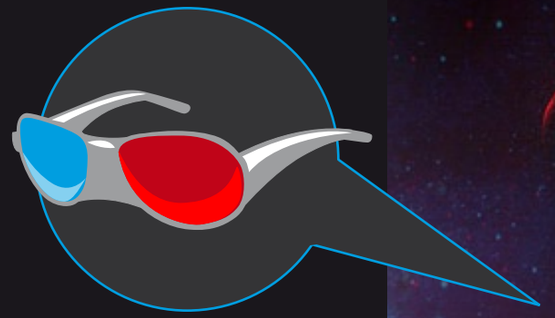
Zoom // View Details / Movement in Y-axis

Warp // Long-Distance Shuttle / Fast-moving in Y-axis

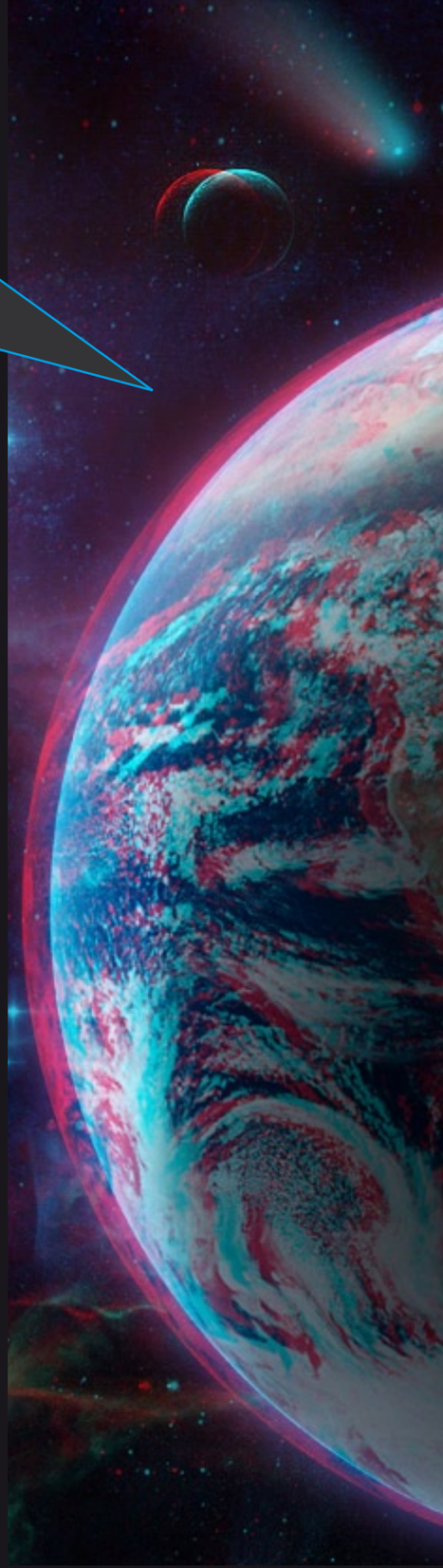
Spacewalk // Movement in Y- and Z-axis

Move // Movement in X-, Y- and Z-axis

3D VIEW



At any time you can open the 3D red/cyan view mode, in this mode, you can put on 3D glasses to experience the anaglyph environment.



Preview