

OpenBSLab: A Virtual Training Environment for Health Workers

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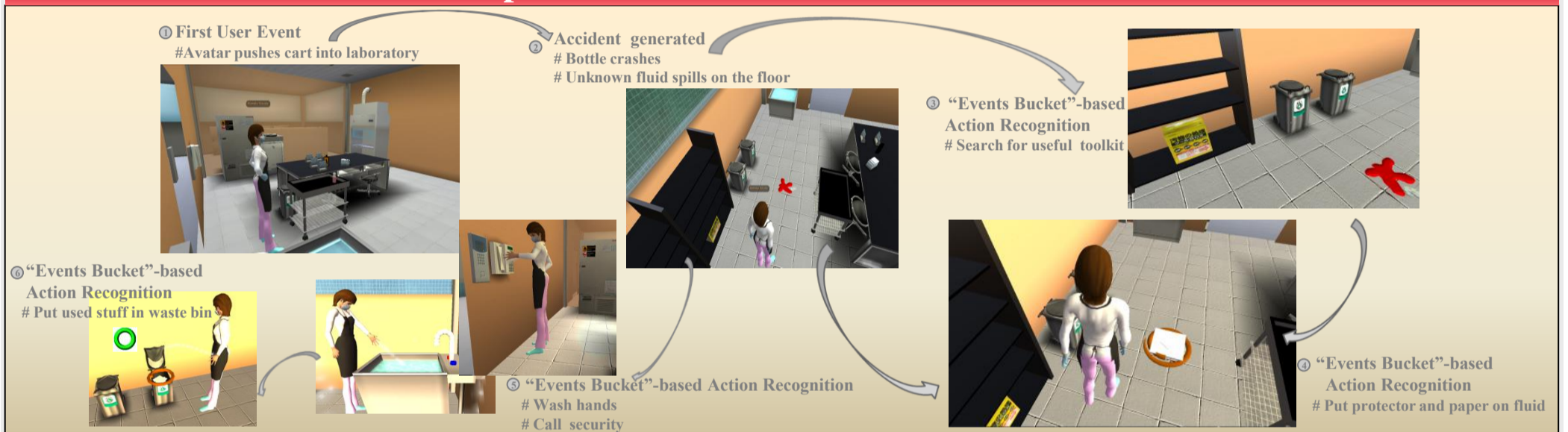
Background

Handling and management of pathogens are an important part of basic infectious disease education, which is required for further strengthening the response capability to bio-terror crises in recent years. It has been pointed out that specialized education of bio-risk management is necessary for handling infectious specimens in clinical practice and for researchers who conduct study on these specimen.

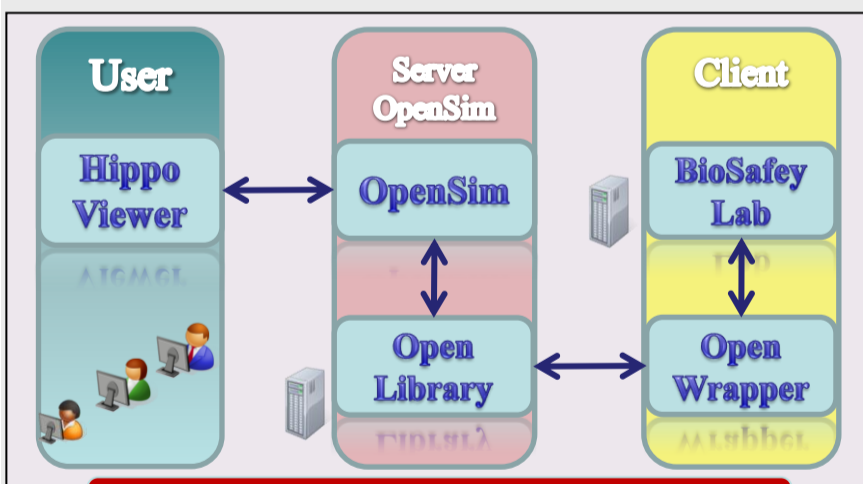
Objective

Focusing on case studies of accidents and near misses, we developed OpenBSLab(Open Bio-safety Lab), an interactive immersive environment based on the 3D Internet (virtual worlds), which implements a self-learning method and is available anytime from anywhere. The OpenBSLab (Open Bio-safety Lab) is being developed in collaboration with the National Institute of Infectious Diseases (NIID).

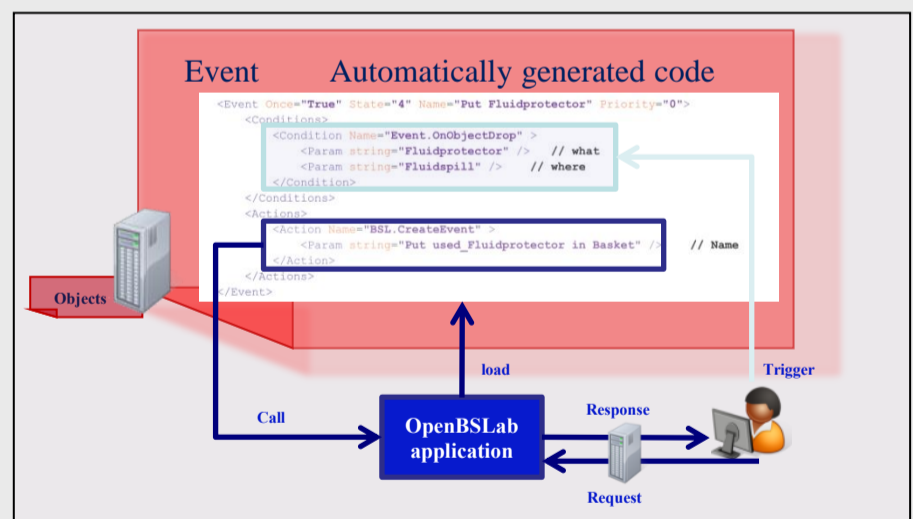
OpenBSLab – User Interface Overview



System Architecture



Architecture Overview



Event Mechanism

- ❖ The architecture contains three main components, the middle one is the server running OpenSim and OpenLibrary.
- ❖ The actual lab application runs on a client pc or the server.
- ❖ The last component is the user with his client machine which interacts with the lab application through the OpenSim environment.
- ❖ Events are organized in “Events Bucket”, user actions could effect and spawn new event from “Events Bucket”.

Simulation Example



User actions effect /spawn new events

