Live in a Disaster Zone application: in which the virtual reality environment overlays the reality

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Carlos Permanente, an engineer with engineering firm firm, Holland Baker, used the constraint of his daily actions (clockwork, work, family life, home, children, working parents etc.), to design a 3D Interactive Reality System designed to understand how living in a disaster zone can affect humans.

â€œThe desire is that this experience can be used to be offered to all the residents of Mexico City and elsewhere to be aware of the limitations of their daily habits, on a first-hand perspective that is uniqueâ€, said Permanente about the designâ€™s concept.

The computer-generated, 3D virtual scenario includes four major â€œfirstsâ€. These parameters are: a) two rivers that drown people in the middle of Mexico City or Guadalajara or Acapulco, b) chains of 10 people drowning in a river in Mexico City, c) a chain of 30 people being killed in a river near Mexico City, and d) 100 million people in the world being affected by a major earthquake in one single city in Africa, Asia or Eastern Europe.

The â€œfinancial thresholdâ€ which is assumed to generate a catastrophic effect is 50% of the gross domestic product (GDP) of Mexico City and reaches the GDP of 50% of the continent in Africa, Asia or Eastern Europe. By using these guidelines, the solution can then be specially created for each individual at the national level.

The simulation does not merely include a scenario of a severe earthquake, it also takes into account the current state of the country and the quantity of infrastructure which will be damaged, for example bridges, communication lines, parking spaces and so on.

Three experts (one expert comes from different universities in Mexico City, while the other two originate from Mexico City University) created this environment in order to have a more advanced knowledge about the effects of a disaster on living conditions. The idea of Carlos Permanente was also to show his own daughter what would happen to her if there were a magnitude 9 earthquake, which would occur in the south of the city.

The simulation also measures how several different types of equipment (e.g. ambulance, telephones, thermal imaging, movie projector and car inflatable slides etc.) and places (e.g. restaurants, shopping malls and restaurants) would affect the population and also give you an idea about how many people are expected to die a few minutes before the collapse of the several tall buildings in Mexico City.

More information can be found at Live in a Disaster Zone website.

A Black And White Photo Of A Fire Hydrant