

Webble World — A Federation of Meme Objects on the Web

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ABSTRACT

The philosophy of memes, as coined by Richard Dawkins, is that every thought and all knowledge which humans share and which flows between us, may collide with other thoughts and knowledge and then reproduce or mutate, all in favor of survival and adaptation. This shows us that human knowledge and cultural expressions are like genes in the way they evolve. This idea gave birth to extensive research on meme media architecture and knowledge federation, known as IntelligentPad/IntelligentBox, created by Y. Tanaka and his group at Meme Media Laboratory in Hokkaido University, Japan.

From that philosophy and research has now risen an evolved and extended web based framework that allows every user to bring their ideas and knowledge to the table in order to create a true federation of humanity's collected knowledge, that is in constant progress and evolution. We have chosen to call this framework Webble World.

Webble World is a new knowledge media architecture that allows us not only to publish compound documents with or without embedded services and tools into a world-wide shared repository like the Web, but also to reedit any compound documents available from such a shared repository, through direct manipulations, and through composition of new compound documents for local reuse and for publication to the shared repository. The reediting of compound documents denotes the extraction and recombination of their visual portions to compose a new compound document with a new layout and new interoperability of the extracted components.

The compound documents accumulated in such a world-wide repository may work as genes to evolve their variety. They can be easily copied, which corresponds to the self-replication of genes. Their reediting by people corresponds to the recombination of genes. Some people may replace a component of a compound document with another to find out an unexpected functional effect. This may correspond to a mutation of a gene. Finally, they are subject of people's evaluation. Some of them are frequently copied and reused, while others are gradually forgotten. This corresponds to the natural selection of genes.

A Webble (where Webble comes from Web-Pebble which is an acronym meaning "Pad Enhanced Building Block Lifelike Entity (on the Web)") as a Meme Media object, may contain more or less anything digitally available. It can be developed by a programmer (with C# and MS Silverlight) to look and behave in any way imaginable within ordinary software development restrictions. When it has been deployed to the web it can be downloaded by any Internet user together with other Webbles directly in the browser and combined together to form new compound Webbles which the user can configure so that they may solve some tasks, or present some content the user wants to share. Many such compound Webbles can be combined as a set of tools and interactive content presentation devices in order to form a Webble application. When the user is satisfied with the creation it can be republished to the web and later found by other users who may use the Webbles either as they were intended or through editing and adding new features and new content. Through its reuse by other users the original Webble evolves step by step every time it gets republished, though previous versions originally developed by someone else are still accessible and are not removed or altered. It makes the Internet a true living community where everyone participates and quite complex software application development can be done online directly in the browser. A huge variety of objects ranging from traditional web documents with text and images, to interactive tools, virtual labs, games and community corners can be developed with these building blocks of 'meme Lego', called Webbles.

As our understanding of culture and knowledge sharing gains, along with the evolvement of today's Web to Web 2.0 and the semantic Web 3.0, the need for new, more open and more powerful tools emerges, tools that fulfill our need to build and communicate, the need to be inspired and further inspire others, the need to develop and change, edit and contribute. A tool like that needs to allow all types of users to participate, from any background and with any sets of skills. It needs to be open and free so it may evolve and grow alongside the rich source of knowledge it is carrying. It should be easy to access from anywhere in the world and it should be fully adaptable. We believe Webble World could be such a tool.