

The Future of Web and Mobile Game Development

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ABSTRACT

Since HTML5 has become open to the public many developers have been experimenting with the new possibilities for web development, the aim of this research paper is to give an overview of what this means to the game development community. This research paper will evaluate new HTML5 elements and JavaScript features. We highlight WebGL, Canvas and WebSockets, which have given developers the opportunity to flaunt their creativity by manipulating images, creating 3D environments and providing real-time interaction.

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1. INTRODUCTION

In 1997 a new and exciting version of the Web's most predominant mark-up language was officially announced as the new W3C recommendation, this was HTML 4.0. It was vastly different to its predecessors and offered an abundance of new features such as the support of Cascading Style Sheets. Before the release of HTML 4.0 the web was largely limited to text and static images, with which many of the websites we use today could not have been created. W3C believed the future of the web lay with XML and thus froze their development of HTML after 4.01 and the release of XHTML. With the support of Apple the WHATWG led by Ian Hickson began work on a specification they called Web Applications 1.0, this was due to a disagreement of XML being the future of web development. Web Applications 1.0 was then used as the spec for the basis of W3C's new HTML version after they admitted being wrong in basing the future on XML. With HTML5 now in a working draft form and offering stacks of new exciting features developers have already begun to create the future of the web.

With the release of HTML5 to simplify developing for the web many new elements were added, along with the addition of several new JavaScript API's. Previous to HTML 5 playing media on a browser required a plug-in or an application installation. For example playing a Flash game requires Adobe shockwave player but now thanks to HTML5 and its new multimedia elements audio, video and canvas that could be a thing of the past. Although HTML5 is not without faults most see it as a huge leap forward for web development. Its release plays a vital role how web games are developed. Recently there has been a massive expansion of casual 'pick up and play' games which are frequently played on social networking sites, smart phones, tablets and web sites this has led to a major shift in the game development industry. The