摘 要

随着科技的发展，时代的进步，互联网已经成为人们日常生活中不可或缺的重要组成部分。而JavaScript这门编程于语言则在其中起着至关重要的作用，绝大多数的现代网站都是用了JavaScript，并且所有的现代Web浏览器--基于桌面系统、游戏机、平板电脑和智能手机的浏览器均包含了JavaScript解释器。这使得JavaScript成为了最广泛的编程语言。除此之外，HTML5也已经成为互联网的新宠，HTML5的出现为Web程序的开发创造了更多的可能，不仅使Web的跨平台性更强，而且新增的属性、方法等使Web的一些应用程序的开发变得更加便利。而在“贪吃蛇寻路算法分析与计算”中将会大量的使用到这两门语言。

“贪吃蛇寻路算法分析与计算”中游戏的布局主要通过HTML5中画布来实现，主要包括游戏主板面的绘制、开始、暂停、前后左右移动等按钮绘制。然而主要的算法分析是通过JavaScript来实现的，如食物在面板中随机的位置出现，贪吃蛇在面板中位置的移动，当按下上下左右键是蛇头方向的改变，当蛇吃到食物是蛇身的加长，以及当蛇头碰到墙壁时触发的事件，当蛇头碰到蛇身时触发的事件等。

关键字：JavaScript、HTML5、贪吃蛇

SUMMARY

With the development of science and technology, the progress of the times, the Internet has become an indispensable part of daily life. And JavaScript is a language that plays a vital role in programming, and most modern Web sites use JavaScript, and all modern Web browsers - based on desktop, gaming, tablet and smart The phone's browser contains a JavaScript interpreter. This makes JavaScript the most extensive programming language. In addition, HTML5 has also become the new darling of the Internet, the emergence of HTML5 for the development of Web programs to create more possibilities, not only to make the Web cross-platform stronger, and new properties, methods such as some of the Web The development of the application becomes more convenient. And in the "Snake Pathfinder algorithm analysis and calculation" will be a lot of use to the two languages.

"Snake search path algorithm analysis and calculation" in the layout of the game mainly through the HTML5 canvas to achieve, including the game board surface drawing, start, pause, before and after the move button to draw. However, the main algorithm analysis is achieved through the implementation of JavaScript, such as food in the panel in a random position, the snake in the panel position of the move, when the upper and lower left and right keys to change the direction of the snake head, when the snake to eat food The lengthening of the snake, and the events that triggered when the snake touched the wall, and when the snake touched the snake.

**KEY WORDS：**Javascript、Html5、Snake

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