Cross browser compatibility, or multi browser compatibility, is a requirement of almost every web site implemented today. Browsers sometimes have different software coding standards than each other. Programs written for a certain browser may have some features that will not be compatible with other browsers. The main features that are not compatible include Cascading Style Sheets (CSS), JavaScript, and even some HTML code. Additional features include ActiveX objects and third party toolkits. A browser code convertor is a useful tool for web site designers. Designers can write their code to conform to software requirements for a certain browser. They then can enter their code into the convertor and receive an updated code that is compatible with all the major web browsers.

Browserbot currently has three main functions;

1. `getElementById()`: The convertor searches for any instance of the `getElementById` method which returns an object by its id. This is a method that is compatible with Firefox, but not with some versions of Internet Explorer. The convertor exchanges this method with another one that is compatible with Internet Explorer and adds the new method at the end of the code.

2. `<tbody>`: Some versions of Internet Explorer require a tag called `<tbody>` in the code after a `<table>` tag in order for the table to be manipulated through JavaScript. The convertor inserts `<tbody>` tags after all `<table>` tags and closing `<tbody>` tags before each closing `<table>` tag.

3. `getAttribute()`: Some versions of Internet Explorer require that the `getAttribute` method uses the `className` attribute rather than the `class` attribute. The convertor finds all instances of this and adds an if statement and a `className` method.

This research was supported in part by the National Science Foundation under grants CNS-050348 and CNS-0751120.