

Haley Ruth - haleymr
Arjun Lalwani - arjun11

Magic Merge

A Merge Conflict Resolution Tool

Problem

Not all Merge Conflicts are really 'Conflicts'

USER 1	USER 2	Merge Conflict Status by Git	Truly Conflict?
String str = "hey";	String str = "Hey!";	YES	YES
String str = "hey";	String str = "hey";	YES	NO

Solution

Create a tool to automatically resolve simple merge conflicts

Current Tools

Git MergeTool - Interactive GUI

Limitations

Doesn't resolve simple conflicts

```
<!DOCTYPE html>
<head>
  <script src="http://code.jquery.com/jquery-1.11.0."
  <script src="http://code.jquery.com/jquery-migrate
  <style>
    body {
      text-align: center;
      font-family: "Verdana", sans-serif;
    }
    ul {
      list-style-type: none;
      padding: 0;
    }
  </style>
</head>
<body>
  <div>
    <h1>Hello!</h1>
    <ul>
      <li>This is line 1.</li>
      <li>This is line 2.</li>
    </ul>
  </div>
</body>
</html>
```

```
<!DOCTYPE html>
<head>
  <script src="http://code.jquery.com/jquery-1.11.0.
  >Hello!</h1>
  <ul>
    <li>This is line 1.</li>
    <li>This is line 2.</li>
  </ul>
  <script src="http://code.jquery.com/jquery-migrate
  <style>
    body {
      text-align: center;
      font-family: "Verdana", sans-serif;
    }
  </style>
  <ol>
    <li>This is line 3.</li>
  </ol>
</head>
<body>
  <h1>Hello!</h1>
  <div>
    <h1>
      <li>This is line 3.</li>
    </h1>
  </div>
</body>
</html>
```

1

2

3

4