Mousey: A Wireless Mouse App for Android

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Opus Citation
Mousey

A Wireless Mouse App for Android

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To Fulfill B.S. Computer Engineering Technology Degree Requirement
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Abstract

Our team researched and developed a wireless mouse application for Android smartphones. Although the idea of using an Android phone as a mouse is not a new one, and there are plentiful applications on the market that function as a mouse, they are all implemented similarly to a touchpad. There were none that respond to the physical movement of the phone, allowing the user to replace a standard mouse both in form and function. The method used requires an implementation of “fused sensors,” the concept of tying together multiple sensors into one “virtual,” or software, sensor that has improved precision and purpose. Our team used existing open source code to control the mouse pointer on the computer end and to transfer data from the phone to the mouse. Research on the algorithms required to translate linear acceleration into mouse movement revealed that our project not only required the fused sensor, but also algorithms to interpret the data in a way that overcomes its inherent noisiness.

Key Terms

- Accelerometer
- Android
- Application
- Fused Sensor
- Java
- Mouse
- Mousey
- Open-source
- Wireless
- Wi-Fi
# Table of Contents

1. INTRODUCTION  
   1.1. Problem Topic  
   1.2. Background  
   1.3. Criteria  
      1.3.1 Operational Requirements  
      1.3.2 Performance Requirements  
      1.3.3 Physical Characteristic Requirements  
      1.3.4 Utilization Environment Requirements  
      1.3.5 Functional Requirements  
   1.4 Methodology  
   1.5 Primary Purpose  
   1.6 Overview  

2. SYSTEM DESIGN OVERVIEW AND RESEARCH  
   2.1 Feasibility  
   2.2 Design Process  
   2.3 Legal Aspects  
   2.4 System Scope  

3. SOFTWARE DESIGN  
   3.1 Software Architecture  
   3.2 Programming Language  
   3.3 Integrated Development Environment  
   3.4 Main Components  

4. UNIT TESTING AND SYSTEM INTEGRATION  
   4.1 Software Testing and Validation  
   4.2 System Integration, Testing, and Validation  

5. PROJECT MANAGEMENT  
   5.1 Schedule and Time Management  
   5.2 Resource and Cost Management  
   5.3 Risk Management  
   5.4 Project Procurement  
   5.5 Lessons Learned  

6. CONCLUSION  

REFERENCES  

APPENDIX A - SOURCE CODE  
   MainActivity.java  
   MouseApplication.java  
   activity_main.xml  
   activity_mouse.xml  
   SettingsActivity.java  
   pref_general.xml  
   AndroidManifest.xml  
   menu/main.xml  
   menu/mouse.xml  
   values/strings.xml  

APPENDIX B - GNU GENERAL PUBLIC LICENSE  

5  
5  
5  
5  
5  
5  
5  
5  
6  
6  
6  
7  
7  
7  
7  
7  
9  
9  
9  
10  
10  
16  
16  
16  
18  
18  
18  
18  
19  
19  
20  
21  
22  
22  
24  
36  
37  
39  
44  
45  
46  
46  
46  
46  
47
# List of Illustrations

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Class Diagram</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>High-Level Data Flow Diagram</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>Mousey Sever</td>
<td>10</td>
</tr>
<tr>
<td>4</td>
<td>Data Interpretation Algorithm Implemented in the stopBert method</td>
<td>12</td>
</tr>
<tr>
<td>5</td>
<td>Startup/IP Entry Screen</td>
<td>13</td>
</tr>
<tr>
<td>6</td>
<td>Main screen</td>
<td>13</td>
</tr>
<tr>
<td>7</td>
<td>Calibrating screen</td>
<td>14</td>
</tr>
<tr>
<td>8</td>
<td>Settings Menu</td>
<td>14</td>
</tr>
<tr>
<td>9</td>
<td>Main Screen with Debugging On</td>
<td>15</td>
</tr>
<tr>
<td>10</td>
<td>Labor Management</td>
<td>18</td>
</tr>
<tr>
<td>11</td>
<td>Risk Register</td>
<td>19</td>
</tr>
<tr>
<td>12</td>
<td>Risk Matrix</td>
<td>19</td>
</tr>
</tbody>
</table>