

Project Critiques

Dancing Robots!
Jarvis Home Automation

Team 1 Members

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Dancing Robots! - Specifications

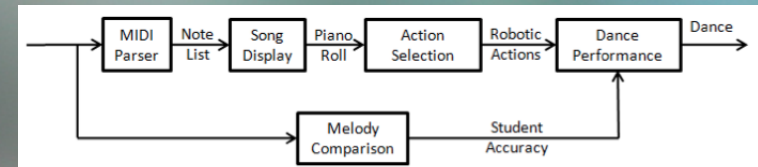
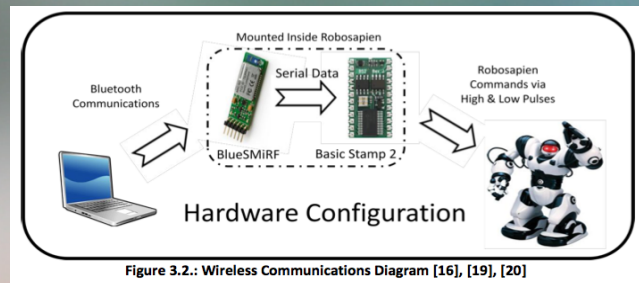
- Build an educational toy that emphasizes entertainment while learning.
- Help children to be interested in both music and technology.
- Provide a relatively cheap and affordable product
- Use Anthropomorphic programmable robots with many available actions across several degrees of freedom to create dance performances.

Dancing Robots! - Goals Fulfilled

- Included a link to the project wiki from the report that contained extensive information on the project progress and goals met.
- Some goals did not have measurable results (help children to be interested in both music and technology.)
- All of the measurable goals were met or exceeded
- Section for future work and improvements was included in the report.

Dancing Robots! - Final Report

- Included figures gave a simple and clear representation of their implementation



Dancing Robots! - Example Diagrams

Dancing Robots - Final Report

- The table of contents provided an easy means of navigating the 30+ page report.
- Including technical data in the appendix and referencing it from the report helped with overall flow and readability.
- All relevant and important sections of the report (Abstract, Design Overview, Design Implementation, and Conclusions) were included.
- Used LaTeX and BibTeX to typeset the report.

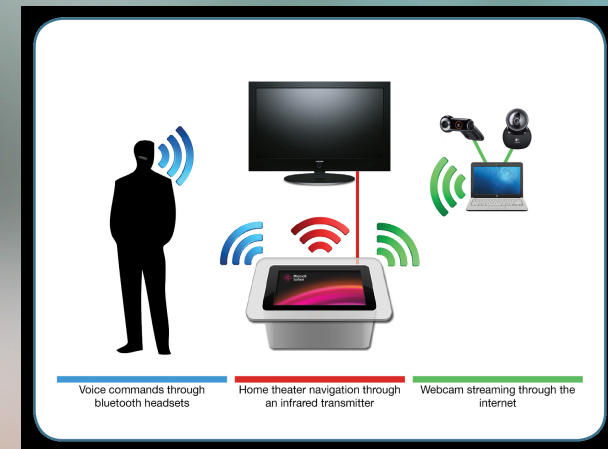


Dancing Robots!

Jarvis Home Automation - Specifications

- Interactive Information Hub for your home
- Use Microsoft Surface Platform
- View video feed from security cameras
- View digital media
- View the weather and other useful info
- Universal Remote
- Goal: "To make the life of the homeowner easier"

Jarvis Home Automation - Specifications Continued



Jarvis Home Automation - Surface Interface

Jarvis Home Automation - Goals Fulfilled

- Video Results
 - Completely implemented (performance wasn't very good)
- Audio Results
 - Completely implemented navigation feature
 - Not successful for intended scope (wanted to integrate voice search to outside data sources)
- Universal Remote ☐
 - More was achieved than expected
- Media Center Results
 - More was achieved than expected

Jarvis Home Automation - Report

- Spent a lot of time explaining problems with the Microsoft surface
- A little redundant
- Good diagrams
- A little disorganized (ex: overall cost located in the Universal remote section)
- Could have used a table of contents

Jarvis Home Automation - Progress Update Video

- Using *Lux Aeterna* from the *Requiem for a Dream Soundtrack* as background music is not recommended.
- Empty beer kegs do not make ideal TV stands.



Dancing Robots! - Design Quality

- Well-Defined Project Goals
- Outstanding Design
- Usable End Product
 - Minimal Work for the End-User
- Expandability

Dancing Robots! - Final Report

- Extremely Well Written
- Great Document Structure
- Easy to Navigate and Read
 - 30+ pages!

Dancing Robots! - Practicality

- Relatively Inexpensive (Both Production and Retail Costs)
- Extremely Portable
- Very Dynamic - Adapts to new songs and sequences
- Very easy setup and install

Practical!

Jarvis Home Automation - Design Quality

- Patchy Design
- To the End-Users...Good luck!
- No Room for Expansion!
- Project Goals to Blame?

Jarvis Home Automation - Final Report

- Little Document Structure
 - Sections Labeled Subsections
- Some Aspects of Project Not Described
 - Microsoft Surface
- Poorly Written

Jarvis Home Automation - Practicality

- Very Expensive! \$15,000 +
- Clunky & Immovable - 'coffee table'
- Operates on a Computer
- Inconvenience of Surveillance Cameras
- iPhone available at this time (Android, iPad)

Impractical

Steps to Success

- Layout Specific Project Goals in the *Beginning!*
- Report Structure
- Consider Practicality...

Questions?