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***Proposal for the development of Morse-Pi***

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*Computer Engineering Technology Students*[*https://github.com/goziethelegion/MorsePi*](https://github.com/goziethelegion/MorsePi)

**Executive Summary**

As students in the Computer Engineering Technology program, we will be working together to integrate the android software and hardware component of the Morse-Pi project. This proposal requests the approval to integrate the hardware portion that will connect to a database as well as to a mobile device application. The database will store Morse messages and its equivalent translations. The mobile device functionality will provide a more interactive user interface to view data from the hardware functionality.

**Background**

The problem solved by this project is to enable ease in the use of Morse code by radio communicators to transmit messages back and forth. This project will facilitate the protection of information by encoding it as well as ensuring ease in decoding it by its listener. Morse code is a predated communication tool used to represent text information in a series of electronic pulses, usually represented as a short pulse (called a "dot") and a long pulse (a "dash"). Only skilled listeners are able to translate and understand Morse codes.

Existing android software products on the market include [1] Morse Transmitters.

In the Computer Engineering Technology program, we have learned about the following topics from the respective relevant courses:

* Java Docs from CENG 212 Programming Techniques In Java,
* Construction of circuits from CENG 215 Digital And Interfacing Systems,
* Rapid application development and Gantt charts from CENG 216 Intro to Software Engineering,
* Micro computing from CENG 252 Embedded Systems,
* SQL from CENG 254 Database With Java,
* Web access of databases from CENG 256 Internet Scripting; and,
* Wireless protocols such as 802.11 from TECH152 Telecom Networks.

This knowledge and skill set will enable us to integrate the hardware and software components.

**Methodology**

This proposal is assigned in the first week of class and is due at the beginning of class in the second week of the fall semester. My coursework will focus on the last two of the 3 phases of this project:  
 Phase 1 Hardware/Software build.  
 Phase 2 System integration.  
 Phase 3 Demonstration to future employers.

*Phase 1 Hardware/Software build*

The hardware and software build has been 80% completed in the past fall term.

*Phase 2 System integration*

The system integration will be completed this winter term.

*Phase 3 Demonstration to future employers*

This project will showcase the knowledge and skills that we have learned to potential employers.

**Concluding remarks**

This proposal presents a plan for exploring outdated communication technologies to improve the contemporary technologies. We request approval of this project.

**References**

[1] https://play.google.com/store/apps/details?id=kristian.jagd.Morse&hl=en