Problem Statement / Definition

for

The Online Postgraduate Application Approval System for EIE

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I. PROBLEM STATEMENT

A. PRIMARY PROBLEM

The postgraduate application system for the School of Electrical and Information Engineering at the University of the Witwatersrand has long been known to be a heavily document-driven one. This is problematic since not only does an unnecessarily large quantity of paper need to be printed for each applying student (such that the relevant documentation can be handed to the appropriate staff members for approval or rejection), but it also poses a problem in terms of administrative duties for the Postgraduate Officer within the school, Ms Mumtaz Adam. Large portions of the Postgraduate Officer's office is taken up by documentation for each applying student and important paperwork can be lost within these piles of documents, particularly entire applications.

B. PROPOSED SOLUTION

A proposed solution to this problem is the implementation of a more online-based approach for the application process. This would drastically reduce the amount of paperwork required to be printed for each student, since the appropriate staff members required to view specific parts of a student's application would be able to do so by simply logging on to an online system. Depending on whether the system is implemented correctly, the possibility of documentation being lost will effectively be reduced to zero. The system will also add a security feature, in that it would prevent parties who should not be able to view certain documentation from doing so, since each user of the system will have their access limited to only the areas that they need to have access to. This solution would also allow for all of a student's information required by the school to be retrieved from Student Information Management Systems (SIMS) electronically and without the need for additional documentation before the application process has even begun. Most importantly, this system will reduce the amount of time required to process each application, thus allowing for more students to be considered within a smaller amount of time.

C. DEGREE OF IMPLEMENTATION

The proposed solution will not be completely implemented within the scope of this project by the development team. Rather, the important aspects of the solution will be implemented and tested, with more of a focus being placed on the higher-level architecture of the system and how it is intended for the software to function.