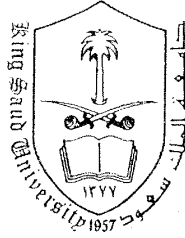


**King Saud University  
College of Computer & Information Sciences  
Department of Computer Engineering**



**CEN 497**

**Advanced Authentication Fingerprint System  
AAFS**

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## **Introduction**

The aim of this project is to perform Advanced Authentication Fingerprint System – "AAFS". The report includes four chapters and conclusion. The first chapter gives a brief review about biometrics, types of biometrics, why fingerprint is the best of biometrics, comparative market share by technology and factors that cause biometrics system to fail.

The second chapter is focused on fingerprint recognition: It involves a brief introduction, fingerprint sensing, fingerprint pattern, fingerprint image processing and feature extraction, fingerprint classification, minutiae detection and fingerprint matching.

The third chapter gives hardware design for AAFS. The hardware part includes the Administrator Computer, Access Devices, Display Device and Local Area Network. The system block diagram of AAFS and the Display Device block diagram and its detailed circuit are described.

The fourth chapter gives software part, which includes the Main Functions, System Program and System Database.

Finally, a conclusion is given where we ensure that the goal of this project is achieved.