# COS 301 ASSIGNMENT
# GROUP 2 B

Duran Cole (13329414)
Johannes Coetzee (10693077)
Estian Rosslee (12223426)
Edwin Fullard (12048675)
Herman Keuris (13037618)
Martha Mohlala (10353403)
Motsoape Mphahlele (12211070)
Xoliswa Ntshingila (13410378)

February 2015

# 1 Introduction

# 2 Architecture Requirements

## 2.1 Architectural Scope

## 2.2 Quality Requirements

## 2.3 Integration and access channel requirements

## 2.4 Architectural Constraints

# 3 Architectural patterns or styles

# 4 Architectural tactics or strategies

# 5 Use of reference architectures and frameworks

# 6 Access and integration channels

## 6.1 Integration Channel Used

### 6.1.1 REST - Representational State Transfer

- Uses standard HTTP and thus simpler to use.

- Allows different data formats where as SOAP only allows XML.

- Has JSON support

  - faster parsing.

- Better performance and scalability with the ability to cache reads.

- Protocol Independent, can use any protocol which has a standardised URI scheme.

## 6.2  Protocols

### 6.2.1  HTTP - Hypertext Transfer Protocol

- Standard web language.

- Easy to write pages.

### 6.2.2  PHP

- Allows dynamic pages to be built.

- Easy integration of JavaScript and HTML with PHP functions.

### 6.2.3  IP - Internet Protocol

- Allows Communications between users.

- In charge of sending, receiving and addressing data packets.

### 6.2.4  SMTP - Simple Mail Transfer Protocol

- Sends emails.

- MIME (Multi-purpose Internet Mail Extensions) which allows SMTP to send multimedia files.

### 6.2.5  TSL - Transport Layer Security

- Alternative to SSL

- Newer and more secure version of SSL.

# 7  Technologies