# User Requirements Web System for the Office of International Programs & Services

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#### 1 INTRODUCTION

#### 1.1 PURPOSE OF THE DOCUMENT

This document is the specification of the user requirements for a IT Senior Project "Web System for the Office of International Programs and Services". It is the primary input to the technical development of those facilities, and the primary specification of the criteria against which the acceptability of those facilities will be evaluated after they have been developed.

This document is intended to be read by:

- a. All responsible for the management of the developments in question, including: users, OIPS representatives, and other interested parties.
- b. Students who undertake all or parts of the development, as the source of and background to the specific requirements to which they are working.

#### 1.2 OVERVIEW

- 1) The Information Technology Senior Project for the Office of International Programs & Services will consists of the production of a website that allows students to browse, apply, and pay for programs provided by OIPS. OIPS faculty and staff will have access to a database for managing and tracking students as they apply for international programs. The system will also allow directors to process student applications and utilize the data generated by applications.
- 2) The general products for this project are:
  - 1. a website with flexible navigability which displays information for programs and serves applications
  - 2. administrators able to edit applications, pages, and certain student data
  - 3. an email system that administrators can use
  - 4. a permission system for directors
- 3) Product specifications:
  - 1. a website with flexible navigability which displays information for programs and serves applications: The website will display a list of available programs for Study Abroad and Exchange programs. Students can also search Programs using different data fields, and refine searches with constraints. Each Program will have an informational page with a link to an application for that specific program. Students will be able to check the progress of their application and make payments towards their balance.
  - 2. administrators able to edit applications, pages, and certain student data: Administrator accounts with the allotted permissions can edit application fields and layout, Program page information and details, and student data, excluding passwords, for error correction and as a part of the application verification process.
  - 3. *an email system that administrators can use*: The email system will consist of subparts.

4. *a permission system for directors*: A system that allows administrators to set what content directors and other administrator accounts have the permission to see and change on the site.

#### 2 GENERAL DESCRIPTION

#### 2.1 OBJECTIVE

This project's objective is to simplify the student and administrator experiences with international programs. Students will find a simpler and more fluid application process, and administrators will make changes to Program and application pages, aggregate information, and approve applications faster.

#### 2.2 SYSTEM CONCEPT

The system will require a Linux environment, Apache HTTP Server, MySQL database, and PHP installation on a web server to function. This stack will be used to run the web server and process database commands to fulfill the user requirements. The expected entry to the site will be through a link from the main Georgia Southern Office of International Programs and Services subsite.

The system the Office of International Programs & Services currently uses for program applications comprises of a series of Google Forms and Sheets. This project will replace this system with HTML forms and a relational database. The main Georgia Southern Office of International Programs & Services web page will have a link to this project's website so students may browse Program pages and take advantage of the developed functions.

#### 2.3 USERS AND USER INTERFACE

Users will be divided into three groups: Students, Directors, and Administrators. There are an estimated 800 Students participating in Programs each year. Directors will number between 10-30. Administrators will be restricted to a very few individuals, around 3-5.

Users will:

- 1) Easily navigate upcoming programs in a general list
- 2) Refine searches through programs using any field
- 3) Submit applications to Programs
- 4) Check the status/progress of their application(s)
- 5) Be able to pay for Programs through Touchnet and check balances

Directors will:

#### 1) Search student information using any field

#### Administrators will:

- 1) Set permissions for Directors
- 2) Reset Director/Student/Admin login information
- 3) Approve applications and change certain student information
- 4) Create new Director/Administrator accounts
- 5) Edit Program pages
- 6) Automatically generate emails and email lists

#### 2.4 OPERATIONAL CHARACTERISTICS

The system should be available 24 hours a day, except when the web host is catastrophically down. Website will be encrypted in TLS 1.2 or 1.3 so that private user data is not leaked. Directors and Administrators will be required to make passwords of 8 or more characters, with at least 1 special symbol.

#### 2.5 SYSTEM ARCHITECTURE AND CONSTRUCTION

Developers will need to consider devices and browsers users will access the website through, which will require code to be flexible to accommodate browsers that may not support certain plugins or features.

#### 2.6 ASSUMPTIONS AND DEPENDENCIES

#### **Assumptions**

**Time frame:** The project will begin October 2018 with a projected delivery date of 15 April 2019 in the form of either:

- 1. A system packaged to be handed over to IT Services and Infrastructure to implement on the GSU server or
- 2. a commercial website under the ownership of the OIPS administrative personnel or other GSU personnel as appropriate.

**Budget:** If not hosted by the existing GSU website, a budget sufficient to employ the web application via an independent web hosting service is assumed.

#### **Dependencies**

Design cannot begin until the initiation of meetings and discussions defining the scope of the application.

Development cannot begin until after receiving feedback, critiques, clarification from OIPS admins, IT Services, Course Instructor.

#### 3 SPECIFIC REQUIREMENTS

#### 3.1 USER FACILITIES

#### **Administrators**

- 1. The user can access the application via the Internet on any connected device.
- 2. The user can log in using a unique password.
- 3. The user has access to the typical features of the Wordpress content management system.
- 4. The user may create, read, update and delete pages via the Wordpress admin dashboard.
- 5. The user may create, read, update and delete student applications via the Wordpress admin dashboard.
- 6. The user can access a dedicated administrative interface from which they can perform the following administrative functions:
  - 6.1. Approve student applications and approve certain student information.
  - 6.2. Automatically generate emails and email lists.
  - 6.3. Extract data useful for federal reports.
- 7. The user can log out securely.

#### **Directors**

- 1. The user can access the application via the Internet on any connected device.
- 2. The user can log in using a unique password.
- 3. The user does not have the capability to edit pages or application details.
- 4. The user has access to a dedicated administrative interface from which they can perform the following functions:
  - 4.1. Search for and access student information.
- 5. The user can log out securely.

#### **Students**

- 1. The user can access the application via the Internet on any connected device.
- 2. The user can navigate and view pages representing the available programs from within the Study Abroad categories.
- 3. The user can apply to a program.

- 4. The user can create an account and check their acceptance status.
- 5. The user can access a link to Touchnet in order to make scheduled payments.
- 6. The user can log out securely.

#### **Technical Requirements**

- 1. Cross browser/platform support (Edge, Firefox, Chrome, Safari PC and Mac) and where possible, Internet Explorer.
- 2. Mobile support (for smartphones, iPhone, iPad, Android, etc.).
- 3. System will secure user data.
- 4. System will be delivered with acceptable level of documentation.

#### **Hardware Requirements**

1. A secure, reliable hosting environment capable of running Wordpress, Apache, MySQL, PHP.

Training for Directors and Administrators will be provided either with a written instruction guide, and via a training seminar.

#### 3.2 SYSTEM MANAGEMENT FUNCTIONS

System will be setup by the Project Team with IT Services, dependent on which hosting option will be approved.

Backup and recovery of the database will either be available through hosting, or through IT Services.

#### 3.3 PROJECT CONSTRAINTS

Time constraints: The system must be available for review by 15 April 2019. The system should be given to OIPS in the form of a fully operational website by the last week of April 2019.

Cost constraints: Budget must be sufficient to cover cost of secure web hosting (domain name, hosting fees if applicable, SSL certificate, etc.).

Scope constraints: The project will be limited to design, customization, installation and implementation within the boundaries designated by OIPS, IT Services and the Course Instructor.

Security constraints: The personal information of all admins, directors and students must be secure and confidential at all times.

## **DOCUMENT CONTROL**

Title: User Requirements: Web System for the Office of International Programs & Services

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**Author:** David Gore, Darrell Grant, Michael Johnson

**Distribution:** Project Sponsor

Project Team Course Instructor

## **2 DOCUMENT SIGNOFF**

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# **Meeting Record**

September 26, 2018	Introductory meeting
October 3, 2018	Discussed separation of Directors and Admins; began Email system concept design
November 1, 2018	Established scope of system with regards to where it will begin on GSU site; Demonstrated part of emailing list system
November 5, 2018	Additional fields added; Automatic email to Dean of Students requested;
November 15, 2018	Arranged meeting with GSU Director of Infrastructure - Ryan Richardson; Kristin approved User Requirements; Datapoint document finalized; Password reset function requested;
November 16th, 2018	Meeting with GSU Infrastructure, established hosting options