# INTRODUCTION

## 1.1 Purpose

The main goal of this SRS document is to provide an Online Class Record System that allows students to view their class standings and to make the recording of student’s scores easier for teachers. This document explains the process of information between its users and the system.

## 1.2 Scope

The Online Class Record System for the School of Information Technology University of Baguio (UBOCRS) is created for the SIT-UB. It is a system with the purpose of making the class record accessible to both students and teachers.

The OCRS provides the users with the following services:

* Viewing of previous and current semester scores
* Computation of grades
* Uploading and printing of student’s scores
* Customizable number of rows of the class record
* Generation of reports such as students who passed/failed in a certain graded activity
* Maintenance of graded activities

The SRVRS is allowed to be used by the following:

* UB-SIT students.
* UB-SIT Teachers.

The levels of accessibility of the system vary depending on the user:

* Administrator
* SIT Students
* SIT Teachers

## 1.3 Definitions, Acronyms, and Abbreviations.

**Definitions:**

* Grades – a mark indicating the quality of a student’s work.
* Grading System – is the process of applying standardized measurements of varying levels of achievement in a course
* Class list- a list of a teacher’s subjects and list of his/her students.
* Database Reports – is the formatted result of database queries and contains useful data for decision making and analysis.
* Deliverables – a thing able to be provided, especially a product of a development process.

**Acronyms:**

* OCRS – Online Class Record System
* UB – University of Baguio
* GUI – Graphical User Interface
* SQL – Structured Query Language
* DB – Database
* RAD – Rapid Application Development

**Abbreviations:**

* App – Application

## 1.4 References

Unpublished References:

* Payoyo, C. et. al. (2013). Inmates Profiling and Monitoring System – Male Dormitory. University of Baguio, Philippines.
* Baguilat, K. et. al. (2015). Landslide Monitoring and Reportng System. University of Baguio, Philippines.
* Calpito, F. et. al. (2013). Architecture and Engineering Material Cost Estimation System. University of Baguio, Philippines.

## 1.5 Overview

The following two chapters of this document will explain the business and overall development of the system. The second chapter explains the business’ general overview and objectives. It also explains how the business’ stakeholders would interact with the system.

Chapter three will cover the overall development of the system in terms of interfaces and overview of the development of system’s purpose and interactions with its users.

# BUSINESS DESCRIPTION

## 2.1 Business Description

The School of Information Technology-University of Baguio (UB-SIT) is one of the College Departments that offers IT courses. Aside from IT, they also offer Computer Science and Computer Engineering courses.

## 2.2 Business Objectives

The OCRS aims to:

* determine the user requirements of the system,
* to implement usability standards in designing the system, and
* to construct and test the system based on software construction and testing standards.

The Online Class Record is intended for the School of Information Technology (SIT), University of Baguio (UB). It aims to make an online access for students to view their class standing that includes their quizzes, seatwork, assignments, examinations and other graded activities. A student will be notified through system notification if there is an upload of score or grade. With these features of the system, students can now oversee the subjects that need improvement and strategize on how to improve and pass that certain subject.

## 2.3 Stakeholder Profile

|  |  |
| --- | --- |
| **Representative** | Carpiso, Cherry Ann  Martinez, Erna Kristi  Toyeng, Hydi |
| **Description** | SIT Instructors |
| **Type** | Interviewee, Panelists |
| **Responsibilities** | Assists in the development of UBSIT-OCRS by providing information about the current grading system |
| **Involvement** | Teaches SIT major subjects. |
| **Deliverables** | UBSIT-OCRS System Profile  UBSIT-OCRS SRS |
| **Comments / Issues** |  |

|  |  |
| --- | --- |
| **Representative** | Raga-as, Terence Ralph C. |
| **Description** | Project Manager |
| **Type** | Requirements Analyst  System Developer |
| **Responsibilities** | Leads in the development of the system, assigns tasks to fellow developers while aiding them in their roles for development. |
| **Involvement** | Supports the development of the system with the other System Developers. |
| **Deliverables** | UBSIT-OCRS System Profile  UBSIT-OCRS SRS |
| **Comments / Issues** |  |

|  |  |
| --- | --- |
| **Representative** | Secuaten, Clever T. |
| **Description** | Assistant Project Manager |
| **Type** | Requirements Analyst  System Developer |
| **Responsibilities** | Assists the development of the system, helps the project manager to assign tasks to fellow developers while aiding them in their roles for development. |
| **Involvement** | Supports the development of the system with the other System Developers. |
| **Deliverables** | UBSIT-OCRS System Profile  UBSIT-OCRS SRS |
| **Comments / Issues** |  |

|  |  |
| --- | --- |
| **Representative** | Felipe, Divina A.  Rom, Ivan Clyde M. |
| **Description** | Team Member |
| **Type** | Requirements Analyst  System Developer |
| **Responsibilities** | Perform data gathering and requirement specification. Development of the system. |
| **Involvement** | Supports the development of the system with the other System Developers. |
| **Deliverables** | UBSIT-OCRS System Profile  UBSIT-OCRS SRS |
| **Comments / Issues** |  |

|  |  |
| --- | --- |
| **Representative** | Almazan, Cherrie |
| **Description** | Reviewer, Class Adviser |
| **Type** | Project Reviewer |
| **Responsibilities** | System Analysis and Development |
| **Involvement** | Review team output and provide recommendations and suggestions based on the output. |
| **Deliverables** | UBSIT-OCRS System Profile  UBSIT-OCRS SRS |
| **Comments / Issues** |  |

# 3. THE OVERALL DESCRIPTION

## 3.1 Product Perspective

The UBOCRS is made to

### 3.1.1 System Interfaces

The SRVRS does not have any specific system interfaces required.

### 3.1.2 Interfaces

Users can interact between with the system will via the GUI, which will be developed by system developers.

### 3.1.3 Hardware Interfaces

The SRVRS does not require any specific hardware interface.

### 3.1.4 Software Interfaces

The system developer used the following software application in the development of the Information System:

* Microsoft Visual Studio 2010 – Provides the IDE that the system developers will need to create and support the system’s GUI.
* Microsoft Access 2010 – Supports the development of the Information System’s database.
* Windows XP and Windows 7 – The target operating systems that can support the use of the Information System.

### 3.1.5 Communications Interfaces

The UBOCRS will be able to accept virtual forms from the users, specifically the clients of the organization, in response the system staff would be able to access the form and act accordingly. In addition, the form will be saved into the database.

### 3.1.6 Memory Constraints

The UBOCRS does not have any required memory constraints.

### 3.1.7 Operations

The UBOCRS would be operational on a daily basis. The only exception where the UBOCRS would not be operational is during system maintenance or power outages as CPDO cannot handle their electrical services within that time as well as most of the equipment available are unusable during a power outage.

### 3.1.8 Site Adaptation Requirements

The UBOCRS would require a web server for its deployment. This can be accomplished through allocating a portion of the existing servers of University of Baguio or through the use of a third party hosting provider.

## 3.2 Product Functions

| Functionality | Description |
| --- | --- |
| **Account Creation** | Allows the user to create their accounts before they can fully use the OCRS |
| **Account Log-in** | Allows the user to log-in/log-out their respective accounts and fully access the OCRS. |
| **Viewing of scores** | Allows the user to view the scores |

## 3.3 User Characteristics

|  |  |  |
| --- | --- | --- |
| **User** | **Description** | **Functions** |
| SIT Teacher | User | * Account login * Account logout * Update Status * View scores * Print record |
| SIT Student | User | * Account login * Account logout * View scores |

## 3.4 Constraints

The following are the current limitations of the OCRS system:

* Only the SIT teacher has full access to all of the functions of the system.
* Users without a working user account cannot access the system.
* The user account’s access levels are strictly observed.

## 3.5 Assumptions and Dependencies

The following assumptions and dependencies are as follows:

* The account management has been preemptively made by the developers.
* The accessibility of the user will vary depending on the user’s login information.
* The system requires reliable internet connection in order for it to be accessed.

## 3.6 Apportioning of Requirements.

The apportioning of the requirements of the OCRS are as follows:

**Phase I:** Requirements Gathering and Analysis

**Phase II:** Prototype and Database

**Phase III:**

**Phase IV:**

# 4. SPECIFIC REQUIREMENTS

## 4.1 Functional Requirements

**4.1.1 UBCPDOSRVRS-UC01 (User Login)**

|  |  |  |
| --- | --- | --- |
| UBCPDOSRVRS-UC01 | User Login | |
| **Description** | This allows users to access the system under their credentials. | |
| **Actor** | Clients, CPDO Staff, Maintenance Manager, Administrator | |
| **Trigger** | The user is required to login. | |
| **Pre-condition** | 1. Login Page is displayed 2. Users must have a registered account | |
| **Post-condition** | The user will be logged into the system and able to access its features. | |
| **Basic flow** | **Actor Action** | **System Response** |
| **Step 1:**User inputs username and password  **Step 2:**User submits the inputted information | **Step 3:**The information is being verified and validated  **Step 4:**Access to the system is granted |
| **Alternate Flow** | **Step 3.3:**  Return to step 1 | **Step 3.1:**Fields contain invalid information  **Step 3.2:**Informs the user about the invalidated fields |
| **Assumptions** | The user account is not currently logged in within the same computer | |
| **Business Rules** | All users are required to have a user account to access the system’s features. | |
| **Field Validations** | **B.1** User Login | |
| **Author** | Liwanag, Jasper B. | |
| **Date** | September 23, 2016  November 23, 2016 | |

**4.1.2 UBCPDOSRVRS-UC02 (Logout)**

|  |  |  |
| --- | --- | --- |
| UBCPDOSRVRS-UC02 | Logout | |
| **Description** | This allows the user to exit the system. | |
| **Actor** | Clients, CPDO Staff, Maintenance Manager, Administrator | |
| **Trigger** | The user wants to exit the system. | |
| **Pre-condition** | The user is logged in the system. | |
| **Postcondition** | The user will be logged out of the system. | |
| **Basic flow** | **Actor Action** | **System Response** |
| **Step 1:**User selects logout  **Step 3:**User verifies logout | **Step 2:**Prompts the user to verify/confirm logout  **Step 4:**Back to login page |
| **Alternate Flow** | **Step 3.1:** User cancels logout | **Step 3.2:** Resume to previous page |
| **Includes** | **4.1.1** UBCPDOSRVRS-UC01(Client User Login)  **4.1.2** UBCPDOSRVRS-UC02(Staff User Login) | |
| **Author** | Liwanag, Jasper B. | |
| **Date** | September 23, 2016  October 28, 2016  November 23, 2016 | |

**4.1.3 UBCDPOSRVRS-UC03(Create User Account)**

|  |  |  |
| --- | --- | --- |
| UBCPDOSRVRS-UC03 | Create User Account | |
| **Description** | This allows the client to create a user account for the system. | |
| **Actor** | Clients, CPDO Staff, Maintenance Manager, Administrator | |
| **Trigger** | The system requires the user to have a user account | |
| **Pre-condition** | 1. Registration page is displayed 2. The user account currently does not exist in the system | |
| **Postcondition** | User will have a user account to access the system. | |
| **Basic flow** | **Actor Action** | **System Response** |
| **Step 1:** User inputs user account registration information  **Step 2:** User submits the information  **Step 5:** User affirms registration | **Step 3:** The information is being verified and validated  **Step 4:** Prompts the user to confirm to complete the registration  **Step 6:** User account will be created and added to the database  **Step 7:** Informs the user that the registration has been completed |
| **Alternate Flow** | **Step 3.3:**  Return to step 1 | **Step 3.1:**Fields contain invalid information  **Step 3.2:**  Informs the user about the invalidated fields |
| **Assumptions** | * The user account information does not match with one currently within the system * The appropriate Access Level will be granted to the user depending on what type of account they have created * Accounts that require Access Level 2 or 3 will automatically be deactivated until the account has been approved by the CPDO Staff or Administrator | |
| **Business Rules** | * Students, faculty members, university officers and employees are eligible to call for the CPDO’s services. * Private institutions and government agencies must send a Request Letter to UB President along with the registration | |
| **Field Validations** | **B.2** Create User Account | |
| **Author** | Liwanag, Jasper B. | |
| **Date** | September 24, 2016  October 28, 2016  November 23, 2016 | |

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# ABOUT THE COMPANY

## 1.1 History

Rosa C. Bautista and husband Dr. Fernando G. Bautista founded this educational institution on August 8, 1948. University of Baguio strived hard to provide competitive environment to students. After several years, the institution introduced new curriculums and degree programs to serve more youths in the city until CHED granted level II and level III accreditation status to some of the undergraduate and graduate programs of the school in 2007.

After the 1990 earthquake, the university was left in ruins. The Campus Planning and Development Office was then established with the goal to reconstruct the ruined facilities and make sure that the university is ready to educate students once again. The CPDO was first handled by Antonio A. Bautista. It was then handled by Engr. Wilfredo Antonio and then passed on to Arch. Johnny Rios, then to Mr. Lou Dario. The CPDO was then given authority to Engr. Bernard Z. Abaya in 2015 who is still the director heading the office at present time.

## 1.2 Information System History

Since the CPDO is established, the only way to process information is through forms. They paper forms which is not viable to last. They search for paper documents compiled in a folder which requires inefficient manpower for advancements in technology today. The CPDO is still manually processing information and is need of a better information system to make actions more immediate.

## 

## 1.3 Organizational Chart

## Positions

**1.4.1 Vice President for Administration**

Atty. Rommel Ayson is currently the overlooking supervisor of CPDO and other offices in the University of Baguio.

**1.4.2 CPDO Director**

Engr. Bernard Abaya governs the staff and makes the decisions in maintaining the facilities of the university. He overlooks the smooth flow of operation of the office.

**1.4.3 CPDO Staff**

The CPDO staff members, Alejandro Aspuria Jr., Roger Aspuria, and Lou Dario, takes care of the documents going through the office. They are also responsible for documenting and processing the transactions and information inside the department.

**1.4.4 CPDO Secretary**

ChirstoreySemangan is the CPDO Secretary and Safety Officer. He checks the reports of the clients and is also accountable for a CPDO Personal Field Report.

## 1.5 Services Offered

**1.5.1 Maintenance of the Facilities**

* The CDPO are responsible for the maintenance of the facilities and equipments in the university. It is in-charge of making sure the university is safe both for the students and the employees.

**1.5.2 Design for New Facilities**

* The CPDO is liable with designing new facilities to make sure that it is disaster proof.

**1.5.3 Safety within the Campus**

* The CPDO are accountable for checking the electrical wirings, plumbing and carpentry around the campus.

**1.5.4 Waste Management**

* The CPDO is in-charge of the waste segregation and recycling of garbage.

**1.5.5 Reservation of Facilities**

* The CPDO is responsible for the reservation of venues and equipment. They make sure that a venue is safe from harm both inside and outside. And they also secure the equipment is fully functional.

# The Information System

## 2.1 Processes

**2.1.1 Maintenance**

* A job request will be filed if there is a problem with the facilities inside the university. The job request will be logged and given a control number. It will be signed by the CPDO Director and then checked by the maintenance group. It will be sent to Asset Management Department for inventory checking and then schedule.

**2.1.2 Reservation of venues**

* If the reservation is made by school faculty or students, it will be processed for the reservation request’s approval. The CPDO staff must check the venue and equipment before the approval of the reservation, if no other issues arise in the process.
* If the reservation is made out of school, it will be processed for both parties to come to terms. The CPDO must negotiate the price of the venue, which it will be approved by the Vice President of Administration and the Finance Department.

## 2.2 Source Documents

**2.2.1 Job Request Form**

* A form filed when a there is a problem in the facilities or equipment around the university.

**2.2.2 Materials Request Form**

* It is a form used to request the materials that are denoted in the Job Request Form.

**2.2.3. A Requisition Slip (Non-Consumables)**

* A form used to ask for non-consumable materials like; curtains, tables, chairs etc.

**2.2.4. B Requisition Slip (Consumables)**

* A form used to ask for consumable materials like; paint, varnish, electrical tape, etc.

**2.2.5 CPDO Personal Field Report**

* A form describing the observation of a place, people or events.

**2.2.6 Overtime Application Form**

* A form used to inform that the work being processed is in need of overtime. It is usually filed 2 days prior to the date of overtime.

**2.2.7 Reservation Form**

* A form used to reserve a place/venue for an event or equipment (mostly for CPDO staff).

## 2.3 Reports

**2.3.1 Job Request Completion**

The CPDO documents all of the Job Requests done or in idle and what are the materials needed in the request.

**2.3.2 Utility Expenses Report**

The CPDO handles the expenses of the university like the electricity and water expenses.

**2.3.3 Project Monitoring**

The CPDO are submitting the project report they made to the VP for Administration and to the president.

## 2.4 Policies

**2.4.1 General Policies**

* A Request Form must be passed to the CPDO before any event could occur within the school’s large facilities such as the gym or swimming pool.
* Reservation of equipment is only viable for CDPO Staff. Equipment is only for maintenance.
* All requirements needed must be finalized one week before scheduled activity.
* Installing heavy structures on the floor of the reserved venue is not allowed.
* Use of pyrotechnics, explosive devices, and flammable substances is strictly prohibited.
* During the activity, applicant should ensure that house protocols for safety, security and health measures are being observed, otherwise, the next request for venue with the same applicant will not be endorsed.

**2.4.2 Job Request Policies**

* All Employees and members of University of Baguio can make requests with the signature of their immediate Dean, Principal, Director and Head of office.
* All repairs concerning carpentry, electrical and plumbing should be requested through Job Request Form and to be passed to the Campus Planning Development Office.
* Requisition Slip must be forwarded every Monday or 1st working day of week, from 8:00AM to 12:00NN and 1:00PM to 4:00PM only.
* Requisition Slips for water and gas refills are exempted from the former policy.
* All containers, such as bottles, cartridges, and the like, must be returned to the CPDO.

**2.4.3 Internal Venue Reservation Policies**

* Requested activity must be included in the University’s calendar of activities, if not, it should be tentatively reserved two weeks before the scheduled activity approved by the Dean/Director/Heads of Offices.
* Students, faculty members, university officers and employees are eligible to apply for the CPDO venue reservation.
* Applicant shall coordinate needed physical set-up to the respective Technical Committees two days before the usage of the venue once the Request Form has approved by the CPDO Director.
* Applicant shall coordinate needed physical set-up to the respective Technical Committees two days before the usage of the venue
* All student activities must process pre-activity request for the endorsement of the school dean and the approval of the activity by the Vice President of Academic Affairs, before the approval of the venue.

**2.4.3 External Venue Reservation Policies**

* Private institutions and government agencies must send a Request Letter to the University of Baguio President.
* Request to use any facilities should be duly endorsed and approved by the President for accommodation of the event.
* Upon submission of the accomplished reservation form not later than one week before the activity, a 50% down payment shall be collected to the applicant.
* 50% down payment should be made upon submission of reservation form to the CPDO. Full payment of the reservation fee, together with PHP 5000.00 bond, should be settled two days before the event. Otherwise, the reservation will be cancelled.

## 2.5 Table of Information System Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **User/**  **Position** | **Source Document /Fields** | **Process** | **Output Report/ Fields** | **Policies** |
| Vice President of the Administration | Overtime application form | The Overtime application form needs to be signed by the Vice President for Administration to be approved. | Project Monitoring | External Venue Reservation |
| CPDO Director | Job Request  Form | The director needs to sign and approve of the Job Requested. | Job Request Completion | Job Request  Internal Venue Reservation  External Venue Reservation |
| CPDO Staff | Requisition Form  Material Request Form | CPDO Staff are required to fill up a requisition slip/ Material Request Form | Utility Expenses Report | Job Request  Internal Venue Reservation  External Venue Reservation |
| CPDO Secretary | Reservation of Venues  CPDO Personal Field Report | He is responsible for the management of reservations.  He is the one that goes to places to report activities that need actions. | Job Request Completion  Utility Expenses Report  Project Monitoring | Internal Venue Reservation  External Venue Reservation |

**2.6 Suggestions and Recommendations**

* The proposed system currently does not cover all of the services of the CPDO, only servicing to the documentation of Maintenance and Reservation services.
* Constant updates on the system on thepreset existing venues and rental equipment on the system are a requirement.
* All system updates must be made on Sundays in order for it to not interfere with upcoming requests coming into the system

**2.7 Flowchart of the existing system**

**2.7.1 Internal Reservation of Venue**

Client CPDO Staff CPDO Director

CPDO gives the client Job Request Form to be accomplished

Client makes a request to the CPDO

The CPDO staff will cancel the request

CPDO Director approves the request

Yes

No

Yes

No

The venue will be under the supervision of the client during the requested time.

Did the client meet with the technical

committee?

Did the client meet the requirements?

**2.7.2 External Reservation of Venue**

Client CPDO Staff CPDO Director President

Are all requirements followed?

Yes

No

CPDO cancels the reservation.

Yes

Request will be approved and be processed by the CPDO.

No

Clients must make another letter

No

Staff inspects the request letter.

Yes

No

Has the rental fee been paid within two weeks?

Are all requirements followed?

Client pays the down payment.

Client receives an approved reservation letter to be filled out.

The venue will be under the supervision of the client during the requested time.

Does the letter follow requirements?

Request will not be approved.

The request letter will be given to the director for approval.

Yes

Client makes a request letter to the President.

**2.7.3 Job Request Process**

Client CPDO Staff CPDO Director

Yes

Does the request require materials?

No

Yes

Clients must make another letter

Client must process the materials needed.

Staff inspects the request letter.

Does the letter follow requirements?

No

CPDO will start working on the request.

Yes

Request will be checked and inspected for the appropriate action.

Client sends a Job Request form to the CPDO