

Functional Specification Document for Grade Roll Book

Version 1.0

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Functional Specifications Document for Grade Roll Book Application:

Purpose: The chief purpose of this document is to provide an overview of implementation of the Grade Roll Book Application in PeopleSoft. There is no existing mechanism in PeopleSoft that helps the users upload their filled Grade Book in a timely manner so that the Admissions and Records personnel can download them and review it whenever required.

The Proposed customization project will help the instructors to upload the filled Grade Book to the PeopleSoft system for further review. The instructors can use any of the existing Grade Book templates to fill and upload. The only condition that the PeopleSoft System would impose is the Grade Book file should be of following formats: .xlsx, .xls, .doc, .docx, .txt, .csv, .html, .pdf.

The files of other formats cannot be uploaded to the system.

Need: There is no existing application that can help the instructors to upload their Filled Grade Book into the system. As such, there is no way to keep track of the Grade Books in a systematic way. So, the customization will help the instructors in submitting the Grade Book into the system and also for A&R to review the Grade book whenever required.

Limitations:

- The system will not validate the data available in the Roll Books.
- Only a set of file formats are accepted by the system.
- No reports are generated based on the data in the Roll Books.

Steps involved in the Customization:

This project involves two broad steps:

- Creation of a File Upload feature into the PeopleSoft system
- Retrieval of uploaded file for viewing.

1. Creation of File Upload feature: This feature involves creation of Fields, Records, Pages and Component and necessary people code necessary to create the File Upload. It also involves in developing the validations required to validate the file format and check the size of the file to be uploaded.

Once the validations are performed successfully, then the process will store the file onto the Data storage system.

Detailed Design for File Upload: An Instructor navigates to the page, then enters the **Class Number, Term, Campus** and the **Course ID** into the fields available on the page and then proceeds to the File Upload button. The record would be an effective dated record to allow the instructor to upload more than one file.

Once the user clicks on the Browse button, a file dialog box opens wherein he selects his Roll Book. Then once he clicks the Attach button, the system will check for the valid file format and checks for the file size. The file size should not exceed a certain limit.

Upon successful validations, the system will save the file onto the File system appropriately and also saves a record into the Database. The saved record will have a reference to the file saved by

the instructor. When the instructor or A&R requests for a particular file, the file will be retrieved based on the values of that particular record.

Instructors can also **delete** a file if they think they have uploaded the wrong file. To delete the existing file, the Instructors need to navigate to a new screen wherein they enter the Term, Course ID and Class Number to view his existing files. Then he can choose any file he desires to delete.

2. Retrieval of the Uploaded File: The second step involves creation of another set of Pages and Component to retrieve the file. This is relatively an easier step. If the Data Storage System is the File System, then logic should be built to retrieve appropriate file from the existing files.

Detail Design: There would be **two ways** of retrieval. The first retrieval would be for **A&R personnel**.

They should enter the **Term, Class Number, Instructor's Name, Campus** and the **Course ID** available on the Retrieval screen and then click on the **Submit** to retrieve the appropriate file.

They can view it and close it whenever they want to.

The second retrieval way is for **Instructors**. The only difference between two retrieval ways is the Instructors can view only the files they have uploaded. Whereas the A&R can view any file they want to. They act as administrator for this module. The screen would be similar to the retrieval screen for A&R people.

Risk Analysis: This project involves uploading and retrieving of the Files by the users. As we create our own set of records, pages and Component, this will not affect the existing pages or components. The only Risk is maintaining the files over a period of time. A backup system should be in place to store all the files if we choose File System as our Data Storage System.

No other database records will be affected.

No loss of data or the application integrity.

Backup Strategy: For this application, we need to have a backup strategy for storing all the uploaded files into the file system. The system should ensure that the uploaded files are backup every night.

Effort analysis:

To perform this task the estimate of the work involves at least 32 man hours of the functional expertise and about 300 hours of the technical expertise. The effort would include Coding, Unit testing and Functional testing.