**CHECKLIST FOR COURSE SCHEDULING APPLICATION**

**GREEN TEAM**

Created by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ , \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Created on: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Last Edited on: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

***PURPOSE OF THE CHECKLIST:***

This checklist is provided as part of the evaluation for the application. The checklist assists SQA member(s) in determining whether the application has met the specification document and requirements. It also assures that application achieves the highest standards relative to format, consistency, completeness, quality, and presentation.

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| --- | --- | --- | --- |
| ***Designated Reviewers:*** | ***Start Time:*** | ***Completed Time:*** | ***Comments:*** |
| *1:* |  |  |  |
| *2:* |  |  |  |
| *3:* |  |  |  |
| *4:* |  |  |  |
| *5:* |  |  |  |
| *6:* |  |  |  |

USER INTERFACE

* Home Page

Are all interfaces clear and well defined?

Can outside users view the class schedule without logging in?

Can faculty members or admins access log in function when viewing as outside users?

After log in, will the application take users to the faculty page or admin page?

* Faculty Page

Can faculty members log out from faculty page?

Can faculty members view their minimum hours and current hours?

Can faculty members view their user names on faculty page?

Can admins switch from faculty page to admin page if they log in as admins?

Can faculty members add course preferences when current hours less than minimum hours?

Can faculty members select time preferences for the selected courses?

Will faculty members be forbidden to add course preferences when current hours greater than minimum hours?

Can faculty members save the preference changes?

* Admin Page

Can admins log out from admin page?

Can admins view their user name on admin page?

Can admins switch from admin page to faculty page?

Can admins switch between the input pages?

Can admins view the current existing accounts?

Can admins edit current existing accounts’ password?

Can admins delete current existing accounts?

Can admins switch to account management page?

Can admins switch to scheduling rules page to set scheduling rules?

Can admins view the input file from the page?

Can admins edit/discard the editable input files from page?

Can admins save the changes to the input file?

Can admins browse file?

Can admins type the directories of the input file?

Can admin submit the input file?

Can admin create schedule from the admin page?

Can admin view/edit schedule from the admin page?

User Accounts and Login Information

* Login Accounts

Are there two admin accounts by default?

Can admins change their usernames on first login?

Are faculty member’s usernames the email addresses in the faculty account input file?

Are the usernames unique?

Can admin change the faculty members information by editing the faculty input file?

After admin edits a faculty account; will the stored faculty preferences be deleted?

After admin edits a the faculty account; will the existing faculty accounts be deleted?

After admin edits a faculty account; will the new faculty accounts be constructed?

Can admins retrieve/edit lost usernames?

* Password

Can admins change their password on first login?

Do faculty accounts have default password when created?

Can faculty members change their password on the first login?

Can admins retrieve/edit lost passwords?

Password constraints:

Are passwords 6 to 9 characters long inclusive?

Are passwords case sensitive?

Do passwords start with alphabetic character?

Do passwords contain one numeric character?

Do passwords contain an exclamation point (!), a question mark (?), or a comma (,)?

* Security

Will the faculty account lock after 3 failed login attempts?

Will the password for the admin account be changed automatically after 3 failed login attempts?

Will the admin receive a courtesy email inviting him/her to log on with the new password?

Is the admin required to change the new password before the account has any functionality?

SCANNERS

Does the scanner report error messages if the file name is incorrect?

Does the scanner report error messages if there is an empty file?

Does the scanner report error messages if there is an empty line in the file?

Does the scanner report error messages if there are missing fields in a line of the file?

Does the scanner report error messages if there are extra fields at the end of the line?

Does the scanner report error messages if there are duplicate data in different lines of the file?

Does the scanner report error messages if the field does not match the current reading field?

Does the scanner report error messages if data exceeds the data limitation?

Does the scanner stop reading the line if an error exists in the line?

Does the scanner continue reading next line if the current line has error(s)?

FILE INPUT

Refer to the test file documentation in Test Files binder for:

* + Available Rooms Test Files
  + Class Times Test Files
  + Conflict Time Test Files
  + Course List Test Files
  + Faculty Member Test Files
  + Prerequisites Test Files
* Documents:

Are all 6 documents created?

Do all 6 documents have file name field?

Are the file names in the file name field in all 6 documents correct?

Are the results of the correctness field in all 6 documents correct?

Are the descriptions of each file in all 6 documents correct?

Is the number of errors of each file in all 6 documents correct?

Have all 6 documents been signed? (Therefore checked)

* Storing:

Does each File\_Reader read through the whole file?

Does each File\_Reader give proper error messages if there is any in each file?

Does each File\_Reader read each field of each file properly?

Does each File\_Reader write the data into output file properly?

FACULTY PREFERENCE INPUT

Can faculty adds a course as preference?

Can faculty views a list of available courses?

Can faculty picks a time preference while picking a course preference?

Can faculty leaves the time preference blank while picking a course preference?

Can faculty submits the preference?

Can faculty changes the time preference for a selected course preference?

Can faculty drops a course preference?

Can faculty saves the changes of course preferences?

SCHEDULING ALGORITHM

Does the algorithm report error message if it cannot open the file contains data from file input?

Does the algorithm read the file input data properly?

Does the algorithm store the data from file input properly?

Refer to the documentation for scenarios file:

Does the algorithm run through all the scenarios with no errors?

Does the algorithm generate schedule for each scenario?

Does the algorithm report courses cannot be scheduled if there is any?

Does the algorithm use heuristic algorithm to create the best schedule?

Does the algorithm store the output properly?

OUTPUT

* Graphical Representation of Output

Can the graphical representation be viewed by any level of users?

Is the graphical representation shown clear and well organized?

Is the graphical representation contains course information?

Is the graphical representation contains room information?

Is the graphical representation contains instructor information?

Is the graphical representation contains time slot information?

Can the graphical representation be sorted by course name?

Can the graphical representation be sorted by room number?

Can the graphical representation be sorted by instructor?

* Excel Representation of Output

Can the Excel representation be viewed by any level of users?

Can the Excel representation be downloaded by any level of users?

Is the Excel representation shown clear and well organized?

Is the Excel representation contains course information?

Is the Excel representation contains room information?

Is the Excel representation contains instructor information?

Is the Excel representation contains time slot information?

Can the Excel representation be sorted by course name?

Can the Excel representation be sorted by room number?

Can the Excel representation be sorted by instructor?