JAVA PROJECT

INFORMATION AND COMMUNICATION TECHNOLOGY SERVICES MANAGEMENT

ABSTRACT

The projects aim to develop a system to allocate the various ICT services like software, type of hardware, network, multimedia, etc. to the college. Various clients can request service to the ICT service department. According to the client's request, experts of the requested service would be provided by the ICTS department to resolve the issue. The various services provided by the department are installation of software, repair computer parts like keyboard repair, CPU parts repair etc., improve network connectivity, multimedia services etc. Clients like students and faculty can place a request for the services after a special approval from the HoD of the respective department. Clients like the head of the department, principal, department coordinators, etc. of the college do not require any approval to request the services provided.

To implement this project, various actors are required. They are the ICT department Admin, Department Staffs, Students, Faculty and HoD and each of them have different roles. The role of the ICT department admin is to show the various services provided by the department, to assign the staff to services offered, to modify staff details, to provide the client with the corresponding staff and to review the feedback given by the clients. ICT Dept Staff has the role of providing services for the client and also can modify their details. HoD has the role to approve or reject the requests from students/faculty, modify faculty details and can request directly to the ICTS Department. Faculties can request for the various services offered by the ICT service. Students too can request for various services offered by the ICT services.

For implementing the project, the following classes are to be used:

1.Class Admin

    Data Members

        Admin_name, Admin_email

    Member Functions :

        add_staff(), modify_staff() ,assign_staff(), check_reviews().

2.Class Staff

Data Members:

Staff_name, Staff_id, Staff_email, Staff_address.

Member Functions :

modify_staff() , display_details()

3.Class HOD:

Data Members:

Hod_name, Hod_id,department, Hod_email,Hod_address.

Member Functions :

add_student() ,add_faculty() , approve_request() ,modify_faculty(),

modify_student(), request_service.

4.Class Faculty:

Data Members :

faculty_name, faculty_id, department, faculty_email, faculty_address and

services_requested.

Member Functions :

add_student(), request_for_approval(), modify_student(), modify_faculty().
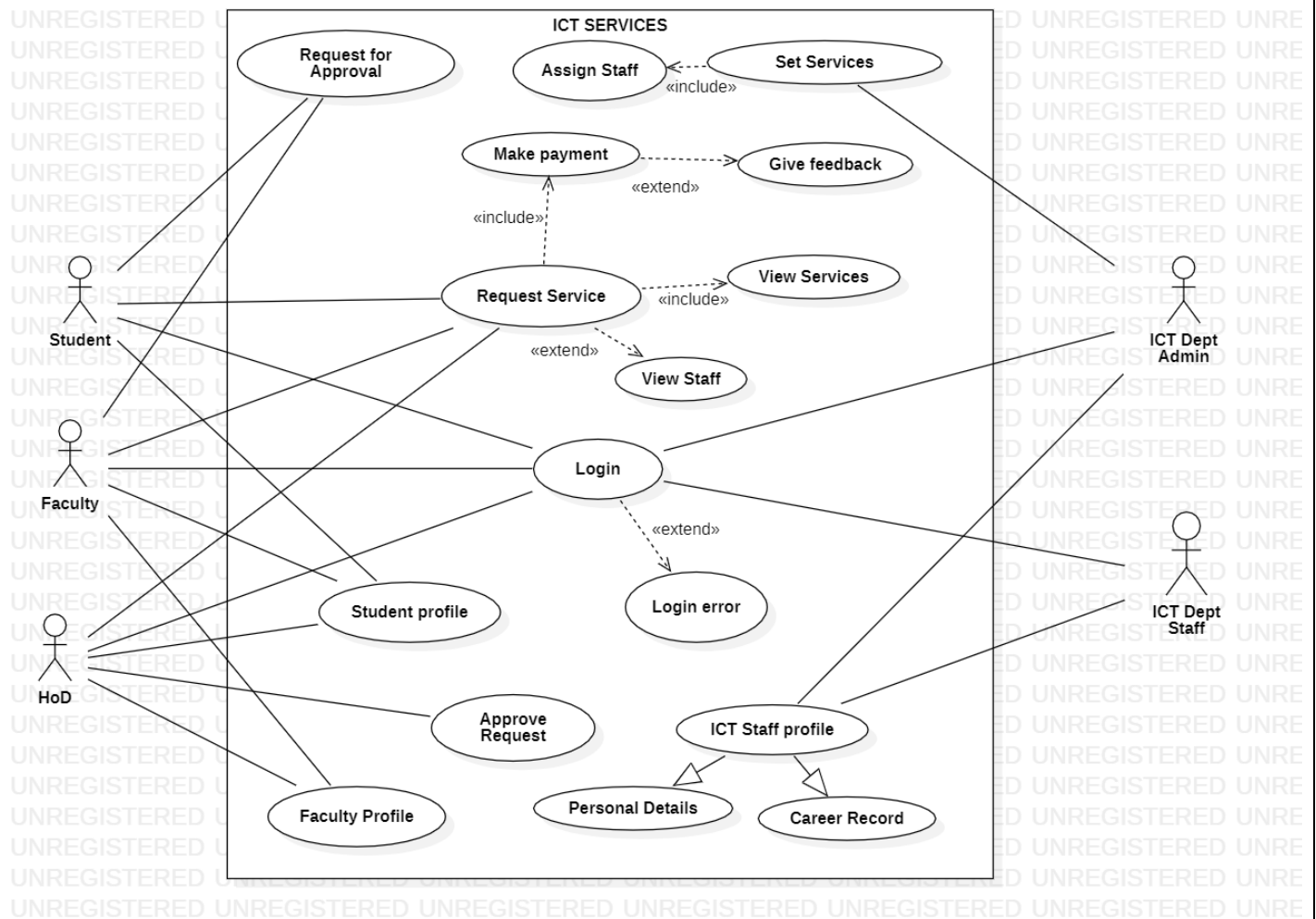
5. Class Student

Data Members:

student_name, student_id, department ,student_id, student_email,

Student_address and services_requested.

Member Functions :

request_application(), modify_student()

USE CASE DIAGRAM

USE CASE DESCRIPTION

1. Login

USE CASE	Login
ACTOR	Admin, Staff,Student, HoD, Faculty
INPUTS	Username and Password
OUTPUTS	State whether username and password are correct
DESCRIPTION	The Faculties, Students, HOD, Admin, and the staff must have a valid username and password. If the client/admin/staff types a valid username and password, Welcome will be displayed on the screen and the client will be allowed to select various services and the admin will be able to assign staff/Modify Staff details/Review the feedback given by clients.

	Else they will be redirected to Login Error.

2. Login Error

USE CASE	Login Error
ACTOR	Admin, Staff, Student, HoD, Faculty
INPUTS	Username and Password
OUTPUTS	Displays error if username or password is incorrect
DESCRIPTION	The clients/admin/staff who gave an invalid username/password will be redirected here. They will have 10 chances to type the correct username/password and the site will be locked after that

3. Request Service

USE CASE	Request Service
ACTOR	Student, HoD, Faculty
INPUTS	Hod Approval for Student/Faculty
OUTPUTS	If approval is valid, select the required service and will get redirected to the payment page Else it will display error.
DESCRIPTION	The clients can request for various services offered by the ICT service.

4. View Service

USE CASE	View Service
ACTOR	Student, HoD, Faculty
DESCRIPTION	The Faculties, Students, HoD can view the services provided

5. View Staff

USE CASE	View Staff
ACTOR	Student, HoD, Faculty
DESCRIPTION	The Faculties, Students, HoD can view the services provided along with the staff assigned to the service if they require them.

6. Make Payment

USE CASE	Make payment
ACTOR	Student, HoD, Faculty
INPUTS	Account details
OUTPUTS	If payment is successful, it would show successfully paid Else it would show an error
DESCRIPTION	The service charge for the particular services can be paid by the client.

7. Give Feedback

USE CASE	Give Feedback
ACTOR	Clients
INPUTS	User feedback
OUTPUTS	Thank you for your valuable feedback
DESCRIPTION	The clients can give their feedbacks after getting the service done, which can be reviewed by the admin.

8. Request for Approval

USE CASE	Request for Approval
ACTOR	Student, Faculty
INPUTS	Request
OUTPUTS	If HoD approves, a message Successfully Approved will be displayed else a message rejected will be displayed.
DESCRIPTION	Students and Faculty can request for the approval for the service.

9. Approve Request

USE CASE	Approve Request
ACTOR	Student, HoD, Faculty

INPUTS	Students and faculties requests for various services to HoD
OUTPUTS	HoD approves or reject the request based on requests made by students and faculty
DESCRIPTION	HoD can analysis the requests made by students and faculties HoD approves it if is required or can rejects if it is not required

10. Set Services

USE CASE	Set Services
ACTOR	ICT Dept Admin
INPUTS	Various Services provided
OUTPUTS	Displays various services provided
DESCRIPTION	Admin can set various services provided by ICT

11. Assign Staff

USE CASE	Assign Staff
ACTOR	ICT Dept Admin
INPUTS	Staff details and their specialization
OUTPUTS	The staff assigned for each service would be displayed.
DESCRIPTION	Admin can assign various staffs to various services provided by ICT Department

12. Student Profile

USE CASE	Student profile
ACTOR	Student, Hod, Faculty
INPUTS	Details of Student
OUTPUTS	Details of Students will be displayed
DESCRIPTION	The student's details can be accessed by students, faculty, and HOD and will be displayed

13. Faculty Profile

USE CASE	Faculty profile
ACTOR	Student, Hod, Faculty
INPUTS	Details of Faculty
OUTPUTS	Details of Faculty will be displayed
DESCRIPTION	The Faculty details can be accessed by faculty and HOD and will be displayed

14. ICT Staff Profile

USE CASE	ICT Staff profile
ACTOR	ICT admin,staff
INPUTS	Staff Details and Specialization
OUTPUTS	Details of staff can be viewed.
DESCRIPTION	The Admin/Staff will be able to view, update any staff's personal details or career records.

15. Personal Details

USE CASE	Personal Details
ACTOR	ICT Admin/Staff
INPUTS	Personal Details of ICT staff
OUTPUTS	The personal details of ICT staff will be displayed
DESCRIPTION	The personal details will be accessible by the ICT admin and ICT staff. The staff will be allowed to view, edit, update their corresponding personal details

16. Career Record

USE CASE	Career Record
ACTOR	ICT admin/staff
INPUTS	Career details of the staff

OUTPUTS	Career of the staff will be displayed
DESCRIPTION	The Admin/Staff can view, edit, update the staff's career record and will be displayed

FUNCTIONALITIES OF ACTOR

1) ICT Department Admin :

    i) To show the services provided.

    ii) To assign staff to provide services.

    iii) To add staff to department.

    iv) Provide staff for the requested service

    v) Modify Staff details

    vi)To review the feedback sent by the client.

2) ICT Department Staff

    i) Modify Staff Details

    ii) Approach clients with the service that they have requested for.

3) HoD

    i) Can request directly to ICTS Department for services

    ii) To approve students/faculties request for service

    iii) To add faculty

    iv) To modify faculty details

4) Faculty

    i)   Can request approval from HoD for the service and request the service.

    ii)   Can add the details of student

    iii)   Can modify the details of students and faculty

    iv)   To send feedbacks about service provided

5) Student

    i)   Can request approval of the HoD for the service and request the service.

    ii)   To send feedback about the service provided

USER INTERFACE DESIGN CONCEPT

Login Page

LOGIN PAGE

LOGIN AS   ● ADMIN   ●STAFF   ●STUDENT ●FACULTY ●HOD

USER NAME

PASSWORD.

Admin Page

ADMIN PAGE

● ADD SERVICE

● ASSIGN STAFF FOR SERVICES

● ADD /MODIFY STAFF

● VIEW FEEDBACK.

Faculty Page

FACULTY PAGE.

- REQUEST FOR APPROVAL
- SEND REQUEST FOR SERVICE.
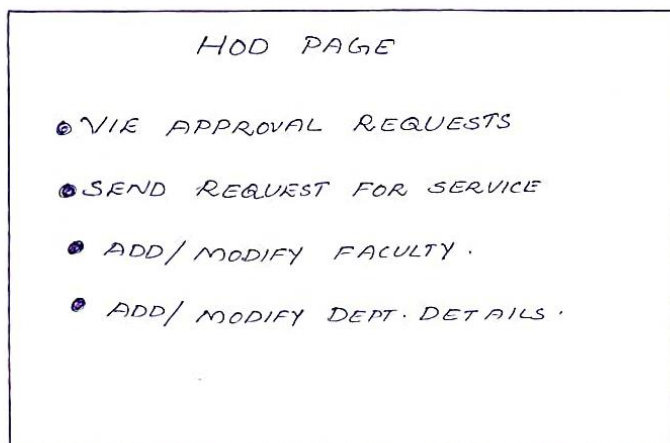- ADD/ MODIFY STUDENT
- MODIFY FACULTY DETAILS.

Student Page

STUDENT PAGE.

- REQUEST FOR APPROVAL
- SEND REQUEST FOR SERVICE.
- MODIFY STUDENT DETAILS.

ICT Dept Staff Page

STAFF PAGE.

- MODIFY DETAILS
- VIEW FEEDBACK

HoD Page

HOD PAGE

- VIE APPROVAL REQUESTS
- SEND REQUEST FOR SERVICE
- ADD/ MODIFY FACULTY.
- ADD/ MODIFY DEPT. DETAILS.

CLASS DIAGRAM

«interface»
Login

-username : string
-password : string

+ login()

Admin

-Admin_Name : string
-Admin_Email : string

+add_staff()
+modify_staff()
+assign_staff()

Service

-Service_name: string
-Service_id : int
-fees : float

+ offer_service()
+pay_bill()

Faculty

-faculty_name: string
-faculty_id : int
-department : string
-services_requested : string

+add_student(),
+request_for_approval()
+modify_student()

HOD

-HoD_Name : string
-HoD_ID : int
-Department : string
-HoD_email : string
-HoD_address : string

+add_student()
+add_faculty()
+approve_request()
+modify_student()
+modify_faculty()
+request_service()

Student

-student_name : string
-student_id : int
-department : string
-student_email : string
-student_address : string
-services_requested : string

+ request_application(),
+request_service()

Staff

-staff_name : string
-staff_id : int
-staff_email : string

+ modify_staff()
+display_details

Personal Details

-staff_address: string
-staff_phone-no : string

+ modify_details()

Carrer Records

-Experience: string

+ add_record()