#### **ADS Week 1 Deliverables**



#### 1. System Design (users, <u>data</u>, system functions)

- Users Data & Functions:
  - All Users:
    - System Login Action (independent of user type);
    - Personal Information Data:
      - Status: displays user type;
      - View unique university ID (UID), 8 digit number;
      - First, Last name, Date of birth;
      - Address;
      - Telephone #;
      - Email address;
      - Current program: Masters or PHD (Students only);
  - o Alumni:
    - Final transcript info;
    - Year graduated.
  - Graduate Students:
    - Course Enrollment Information (transcript data):
      - All courses taken currently and in the past:
        - Semester:
        - Year;
        - Final grade (if taken in the past);
        - o Credit hours.
    - Each student has a faculty assigned (relationship);
    - Form 1 Data;
    - Apply for Graduation triggers Graduation Verification Audit Process;
  - Faculty Advisors:
    - Can view Form1 Data of the assigned student;
    - Approve PhD Students Thesis;
  - Grad Secretary (GS):
    - Complete access of data of any student;
    - Assigns/connects faculty advisors to students & can change at any time;
    - Receives notifications on the homepage to clear a student for graduation (one notification window + button per student)
  - System Admin:
    - Has access to everything;
    - Can create, add, and delete other accounts and their variables/data;
      - When creating new users: fills out a form and a record is stored in DB.
- Program Requirements Data Stored Separately in the Database;

- Course Catalogue Data Stored Separately in the Database;
- Graduation Verification Audit Process:
  - Before Program Starts:
    - Student fills out Form 1;
    - System checks if Form 1 is compatible with Requirements;
    - Throw an error and ask the user to refill Form 1 if it doesn't match with reqs.
  - After All Classes Have Been Taken:
    - Compare student GPA with the required GPA;
    - Check Credit Hours;
    - Check Grades Requirements
    - [PhD only: wait for the FA to approve thesis completion.
    - Wait for the GS for "clearing to graduate" (permission)
    - Student info moved from Student table to Alumni table.

(For the ER diagram please see the end of this document)



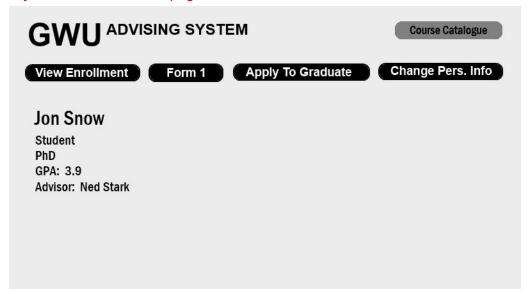
#### 2. Web Functionality and Design (web pages, user menus, actions)

- Non-logged in Users:
  - Login action:
    - Should not differentiate by user type;
    - SQL query should identify the user type;
    - Redirect to the appropriate page (depends on user type);
- Logged in Users full navigation menus of user home pages & functionality:
  - Header (all users): university name and logo;
  - Personal information is displayed on the home page (all user types);
  - Log out action;
  - Alumni Menu:
    - Change personal information;
    - View final transcript info.
  - Student Menu:
    - Change personal information;
    - View Course Enrollment Information (*transcript* information);
    - Fill out Form 1;
    - Apply for graduation button (forwards to a separate page with this form):
      - Enter Student Number;
      - Select Your Degree (MS/PhD);
      - "Submit for audit" button.
  - Faculty Advisors Menu:
    - Change personal information;
    - Receives notifications on the homepage to approve thesis completion for PhD students
    - My Students (forwards to a page with list of assigned students):
      - For each student can: view Form 1
  - Grad Secretary Menu:
    - Change personal information;
    - Select Student (forwards to a separate page with list of students):
      - For each student can: Choose Advisor (drop down list of advisors)
    - Receives notifications on the homepage to clear a student for graduation (one notification window + button per student)
  - System Admin Menu:
    - Change personal information;
    - Create A New User;
      - Forwards to a separate page with the form for that new user;

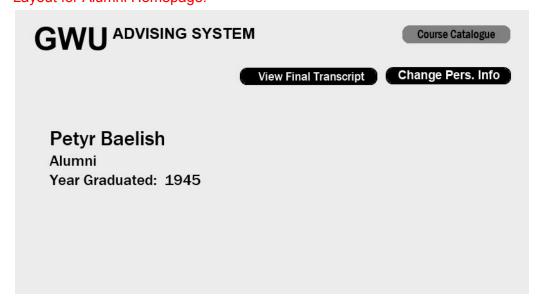


#### 3. Page Layout (logged in user)

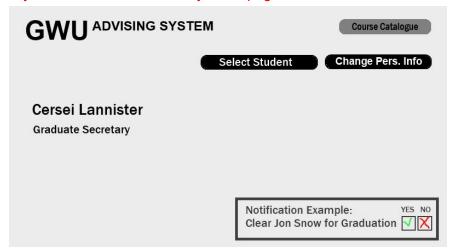
- Keeping simple for Phase 1;
- Layout for Student Homepage:



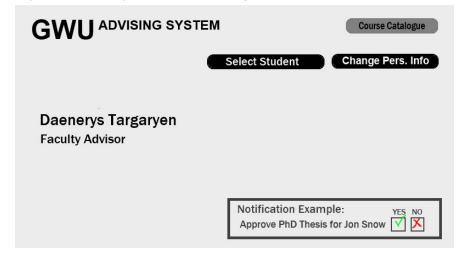
Layout for Alumni Homepage:



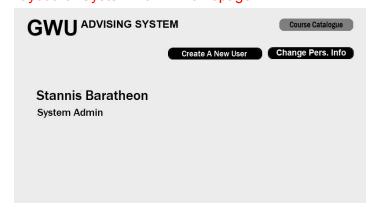
• Layout for Graduate Secretary Homepage:



Layout for Faculty Advisor Homepage:



Layout for System Admin Homepage:

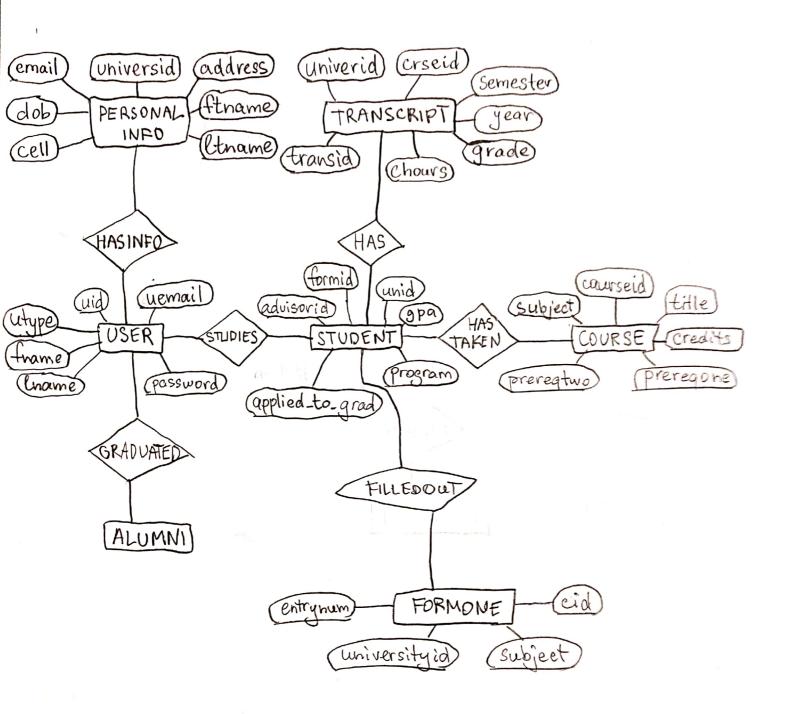


- **4. Team Task Assignments** (System & Web Design Tasks/Pages/Users outlined above)
  - Jake:
    - Design Database (working together on this);
    - Alumni Page and functions;
    - Grad Secretary page and functions;
    - Login & Logout;
  - Brian:
    - Page Templates (working together on this);
    - System Admin and functions;
    - Faculty Advisor page and functions;
    - Student Page & Form 1;
  - Stanislav:
    - Design Database (working together on this);
    - Populate Database;
    - Student Page Functions Apply to Graduate Functionality;
    - o Graduation Verification Audit Process Link with Brian's work on Form 1;

#### 5. Project Specification Clarification Questions

i. What does it mean for the System Admin to be able to do "everything"?

# ER Diagram



March & Washans Team

### SCHEMA

March 6, Team Wuhan

USER

UTYPE UID FNAME LNAME UEMAIL PASSWORD

STUDENT

UNID PROGRAM GPA FORMID ADVISORID APPLIED\_TO\_GRAD

COURSE

SUBJECT COURSEID TITLE CREDITS PREREQUNE PREREQTWO

ALUMNI

UNIVID YEAR GRAD

TRANSCRIPT

UNIVERID CRSEID SEMESTER YEAR GRADE CHOURS TRANSID

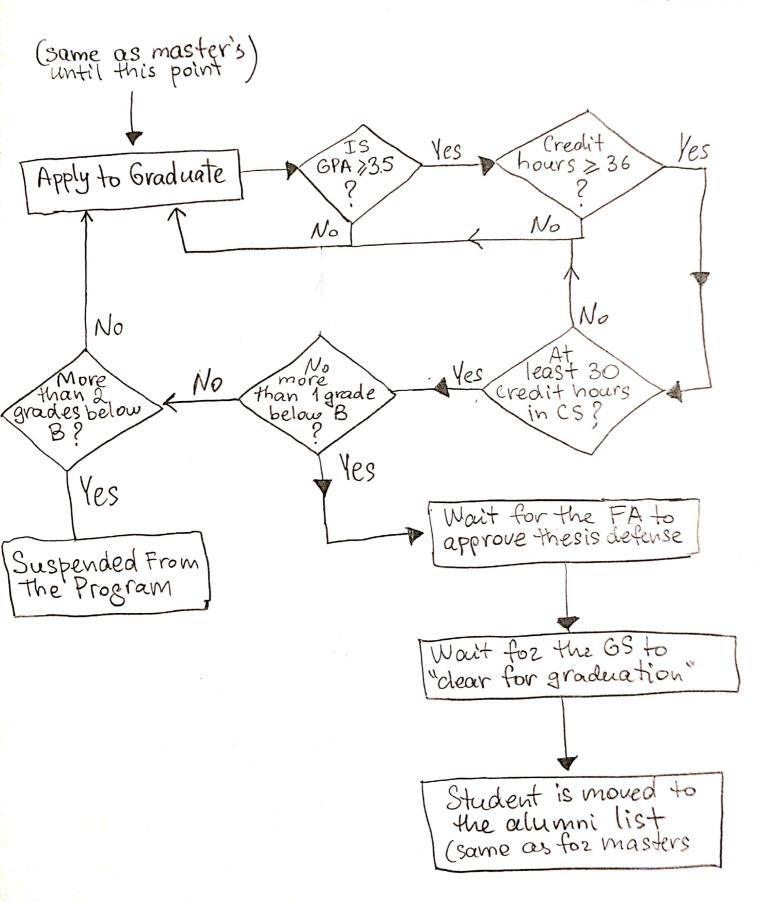
PERSONALINFO

UNIVERSID FTNAME LINAME DOB ADDRESS EMAIL CELL

FORMONE

ENTRY NUM UNIVERSITYID SUBJECT CLID

MASTERS PROGRAM: FLOWCHART March 6, Team Wuhan Become a student Fill out Form 1 (Fill out again, you cannot begin classes Form 1 is a simple form where students list all classes they plan to take before they graduate Is Form 1 No Compatible W/ Requirements? (automatic) Yes (e.g. CSCI 6212,6221,6461 are present on the Form 1) ( Form 1 is submitted only once) Student takes all classes Yes 15 GPA >> 3.0 ? Apply to Graduate No Automatic rejection No 2 grades 5? Wait for the GS to "clear for graduation Cleared" Does transcript match the Form 1 Student is moved the alumni list Student records are deleted from "Student" table (see schema) Yes



## "APPLIED TO GRADUATE" FLAG

Applied\_to\_grad is an integer attribute of the "Student" relation in the DB. It may have 4 values:

0 - student did not apply for graduation

1 - student is waiting for thesis approval from Faculty Advisor

2 - Student is waiting for Graduate Secretary to "clear for graduation"

3 - final approval has been given. Student has graduated.

FOR MASTER'S the sequence is:

FOR PHD the sequence is:

 $0 \rightarrow 1 \rightarrow 2 \rightarrow 3$ 

March 6, Team Wuhan