

Univerzitet Singidunum
Tehnički fakultet

Studijski program: Softversko i informaciono inženjerstvo

Projekat iz predmeta Internet softverske
arhitekture i Klijentske veb aplikacije:
Learning Management System

Projektni tim:

Ime i prezime: Radivoj Gibarac

Broj indeksa: 2017271152

Projektni zadatak

Implementirati aplikaciju koja treba da obezbedi informacione zahteve studenata, nastavnog i nenastavnog osoblja koji pripadaju visokoškolskoj instituciji kao i korisnika koji ne pripadaju visokoškolskoj instituciji.

Funkcionalni zahtevi

Aplikaciju dizajnirati i implementirati tako da podrži sledeće osnovne funkcionalne zahteve:

- Upravljanje evidencijama studijskim programima (predmeti, silabusi)
- Upravljanje evidencijama o studentima (lični podaci, pohađanje kurseva, polaganje ispita)
- Upravljanje evidencijama o nastavnom osoblju (lični podaci, angažovanje u izvođenju nastave, sprovođenje ispita)
- Upravljanje evidencijama o nenastavnom osoblju (osoblje u studentskoj službi, administrator sistema)
- Obezbeđivanje informacija za korisnike koji ne pripadaju visokoškolskoj instituciji (osnovni podaci o visokoškolskoj instituciji, osnovni podaci o studijskim programima)

Posebno, treba obezbiti sledeće funkcionalnosti:

- Omogućiti eksport podataka o studentima kao PDF dokument.
- Omogućiti dodavanje rezultata evaluacije ispita u vidu XML dokumenta, tako što se navodi putanja do XML dokumenta za koji se vrši upload.
- Omogućiti eksport rezultata evaluacije u vidu PDF dokumenta.

Nefunkcionalni zahtevi

- Arhitektura treba da bude troslojna veb aplikacija.
- Komunikaciju realizovati isključivo putem RESTful API sa JWT autentifikacijom.
- Za implementaciju koristiti sledeće tehnologije
 - o Programski jezik/jezici: Java, XML, TypeScript
 - o Frontend : Angular 20
 - o Backend : Spring Boot 3
 - o Baza Podataka : MySql

Opis rešenja

Aplikacija je realizovana kao veb aplikacija, koja se takođe predstavlja i kao stranica univerziteta. Aplikacija omogućava administraciju osoblja , studenata i studijskih programa.

Učesnici i uloge u sistemu su studenti , nastavnici , osoblje studentske službe, administratori i neregistrovani korisnici.

Funkcionalnosti koje aplikacija obezbeđuje korisnicima su sledeće.

Neregistrovani korisnici mogu da:

- Pregledaju stranice univerziteta, gde mogu naći osnovne podatke o univerzitetu.
- Pregledaju stranice fakulteta, studijskih programa na fakultetima, predmete, silabuse.
- Registruju se.

Registrirani korisnici kao i sve dalje navedene uloge imaju mogućnost da se :

Prijave na sistem.

Uređuju svoj profil.

Odjave se.

Studenti mogu da :

- Pristupe informacijama o predmetima koje trenutno slušaju.
- Pristupe istoriji studiranja koja sadrži broj polaganja predmeta i položene predmete, gde su obeleženi ocena i ukupan broj osvojenih ECTS bodova.
- Izvrše prijavu ispita za predmete koje slušaju.

Nastavnici mogu da :

- Pregledaju predmete na kojima su angažovani.
- Prave opise za termine svojih predmeta i dodaju dodatne zahteve ili obaveštenja za svoje predmete.
- Pregledaju spisak studenata sa njihovim detaljima.
- Da unose ocene za predmete na kojima su angažovani.(samo u roku od 15 dana od ispita)

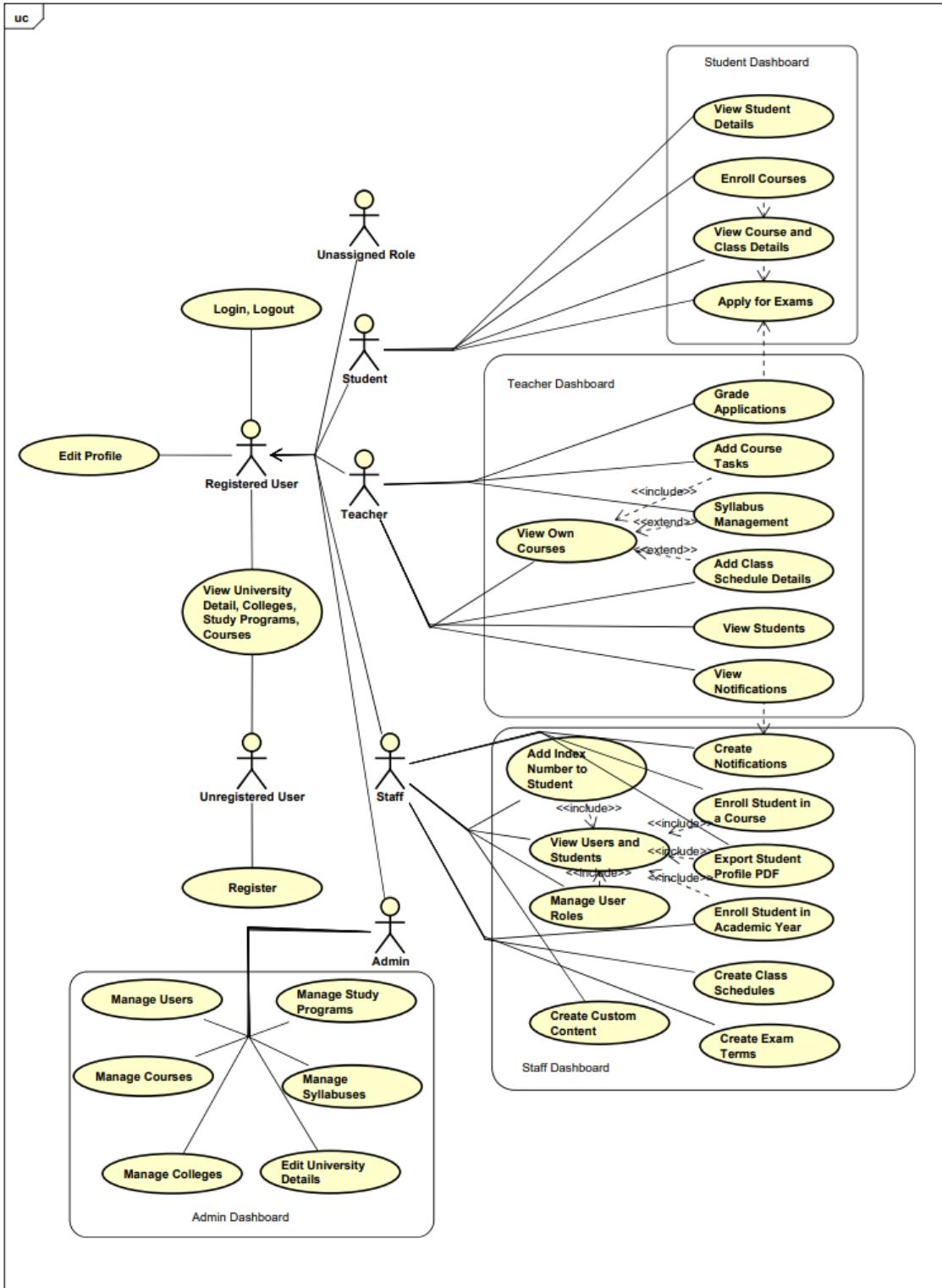
Osoblje može da:

- Vrši upis studenata.
- Izdaje dokumente o studiranju.
- Formira rasporede nastava i ispita.
- Objavljuje obaveštenja i obaveštenja za osoblje.

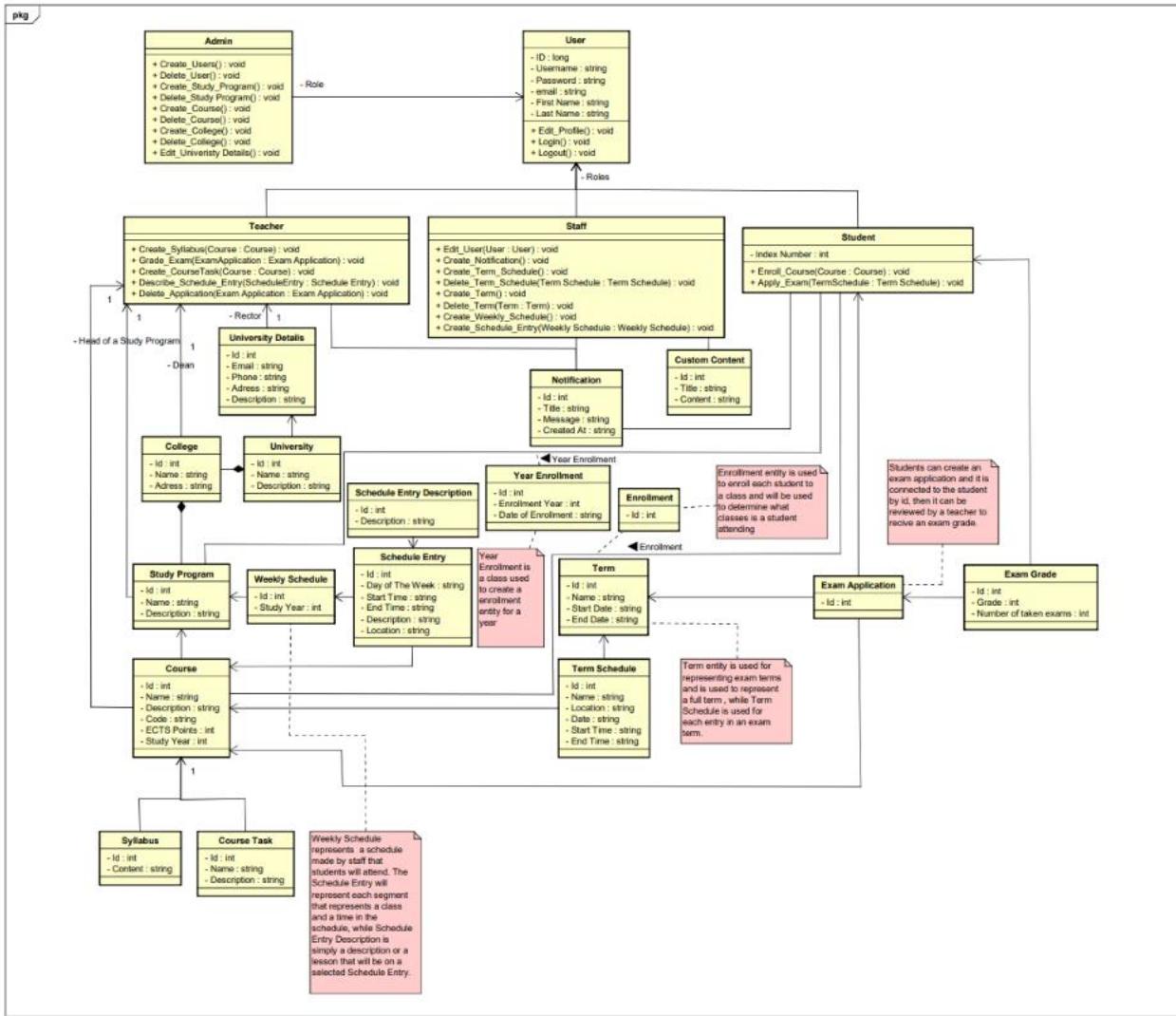
Administratori mogu da:

- Vrše administracije registrovanih korisnika.
- Vrše administracije studijskih programa.
- Vrše administracije organizacije.
- Dodaju nove korisnike.

UML specifikacija



Sl. 1 - Use case dijagram gde se opisuju mogućnosti korisnika po ulogama.



Sl. 2 - Dijagram klasa.

Entiteti korisnika :

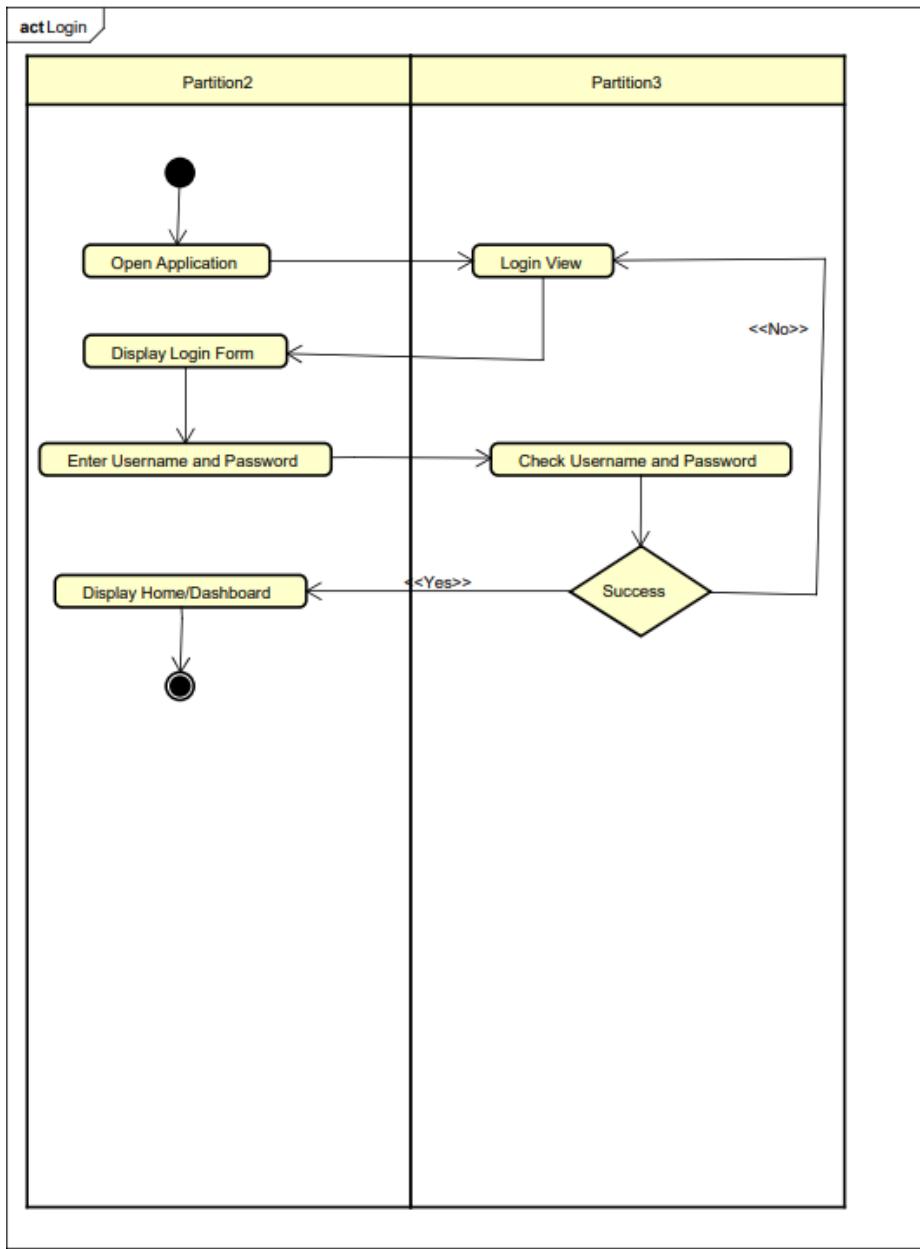
- User – entitet koji predstavlja registrovane korisnike i moze sadrzati jednu od 4 uloge(Admin, Teacher, Staff, Student)
- Admin – uloga User-a koja ima mogućnosti kreacije, brisanja i izmene korisnika i ustanove.
- Teacher – uloga User-a koja ima mogućnosti pregledanja predmeta, dodavanja opisa njima i ocenjivanja studenata
- Student – uloga User-a koja ima mogućnost pregledanja svog studiranja i prijavljivanja ispita
- Staff- uloga User-a koja obavlja administrativne poslove ustanove

Entiteti ustanove:

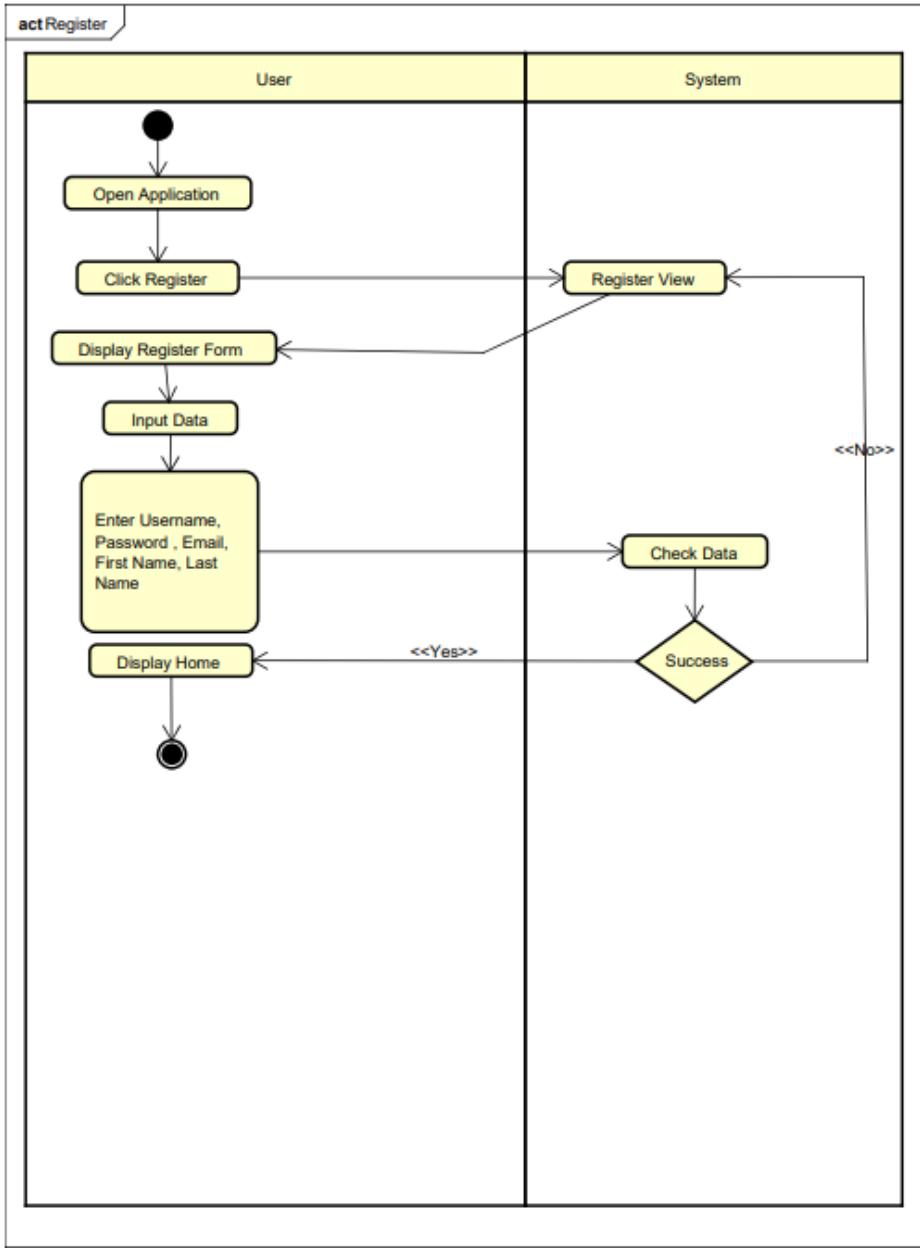
- University- predstavlja ustanovu kao ceo entitet
- University details- opis i detalji o samom univerzitetu. Može sadržati jednog rektora koji je uloge Teacher.
- College- Fakulteti u sklopu univerziteta. Može sadržati jednog dekana koji je uloge Teacher
- Study Program- Studijski programi u sklopu fakulteta(College). Može sadržati jednog šefa katedre koji je uloge Teacher.
- Course- Predmeti u sklopovima studijskim programima(Study Program).Može sadržati jednog zaduženog nastavnika.
- Syllabus- Sažetak materijala ili opis gradiva predmeta(Course)

Funkcionalni entiteti:

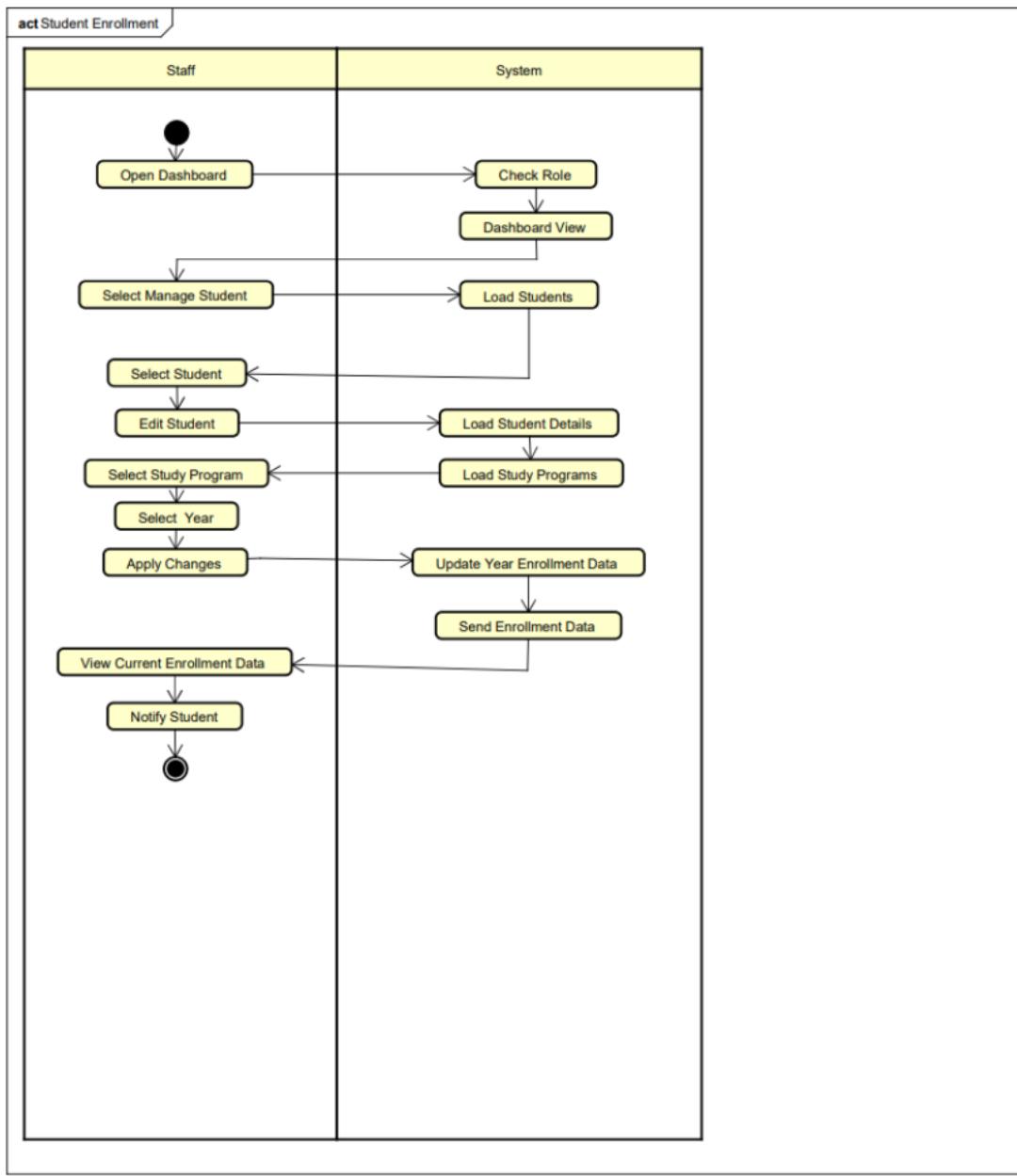
- Course Task- Zadatak koji postavlja nastavnik(Teacher) koji će biti prosledjen studentima.
- Weekly Schedule- Raspored predavanja kao ceo entitet koji formira osoblje (Staff)
- Schedule Entry – Predstavlja stavke koje se nalaze unutar rasporeda predavanja (Weekly Schedule). Formiran od strane osoblja.
- Schedule Entry Description – Predstavlja opis i detalje predavanja koji su zakazani na rasporedu. Ovu stavku opisuje nastavnik(Teacher)
- Custom Content – prosledjene poruke izmedju osoblja(Staff) koje se može koristiti za manja obaveštenja ili nabavku potrebština.
- Notification - Obaveštenja koja pravi osoblje(Staff) i zatim se prosledjuje ulogama kojima je to namenjeno.
- Term- Ispitni rok kao ceo entitet , koji opisuje osoblje(Staff)
- Term Schedule – Stavke koje se nalaze unutar Ispitnog Roka (Term-a), opisuje osoblje(Staff)
- Year Enrollment- Entitet koji predstavlja upisane godine. Dodeljuje osoblje(Staff) korisnicima uloge Student.
- Enrollment – Entitet koji predstavlja pohadjane predmete za korisnike uloge Student, može ga dodeliti osoblje(Staff) ili sam Student.
- Exam Application – Prijava Ispita koju student pravi u zavisnosti od rasporeda Ispitnog Roka (Term)
- Exam Grade – Ocenjen Ispit , formiran prijavom ispita (Exam Application), koji Nastavnik (Teacher) ocenjuje.



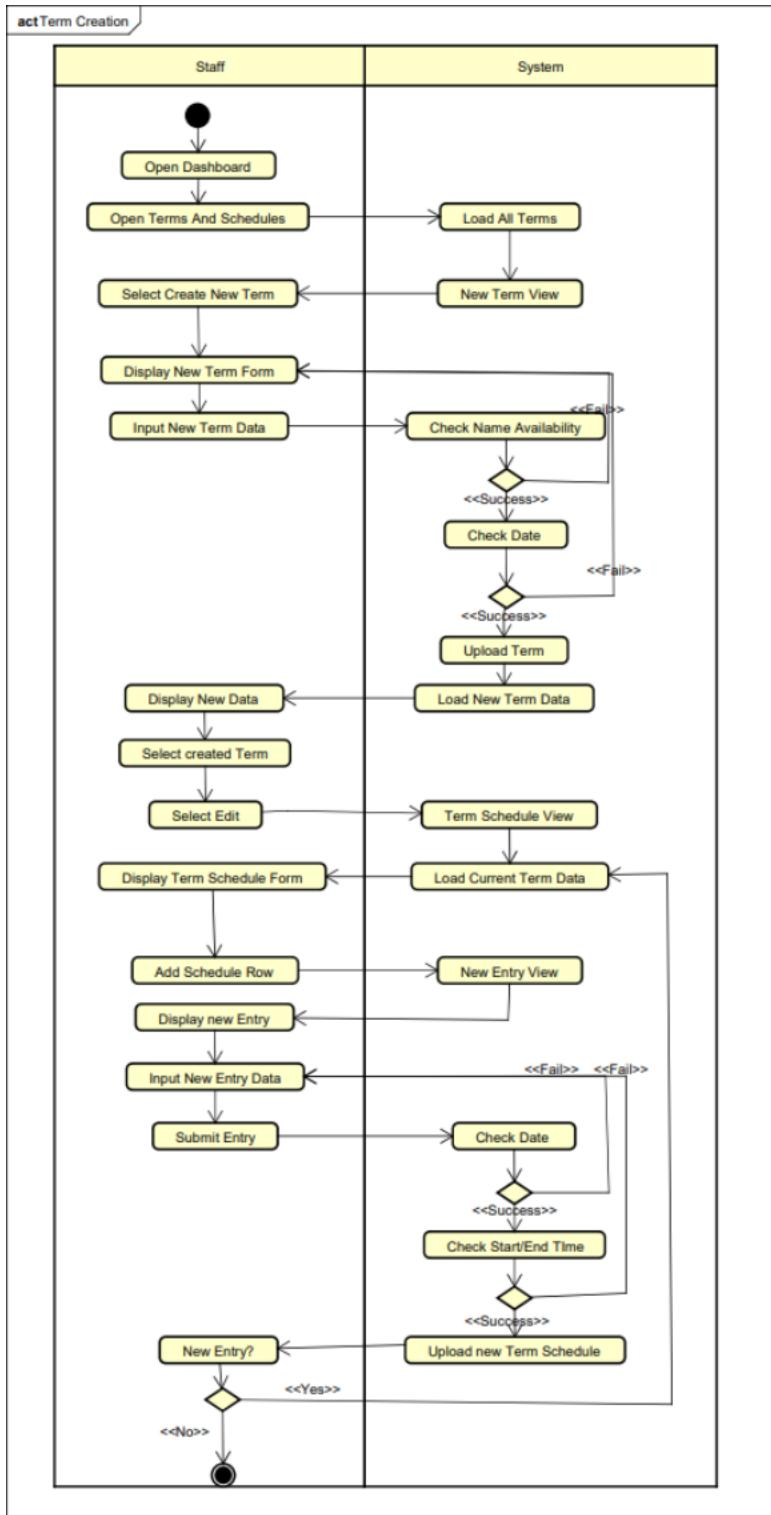
Sl. 3 – Dijagram aktivnosti prijave korisnika (Login).



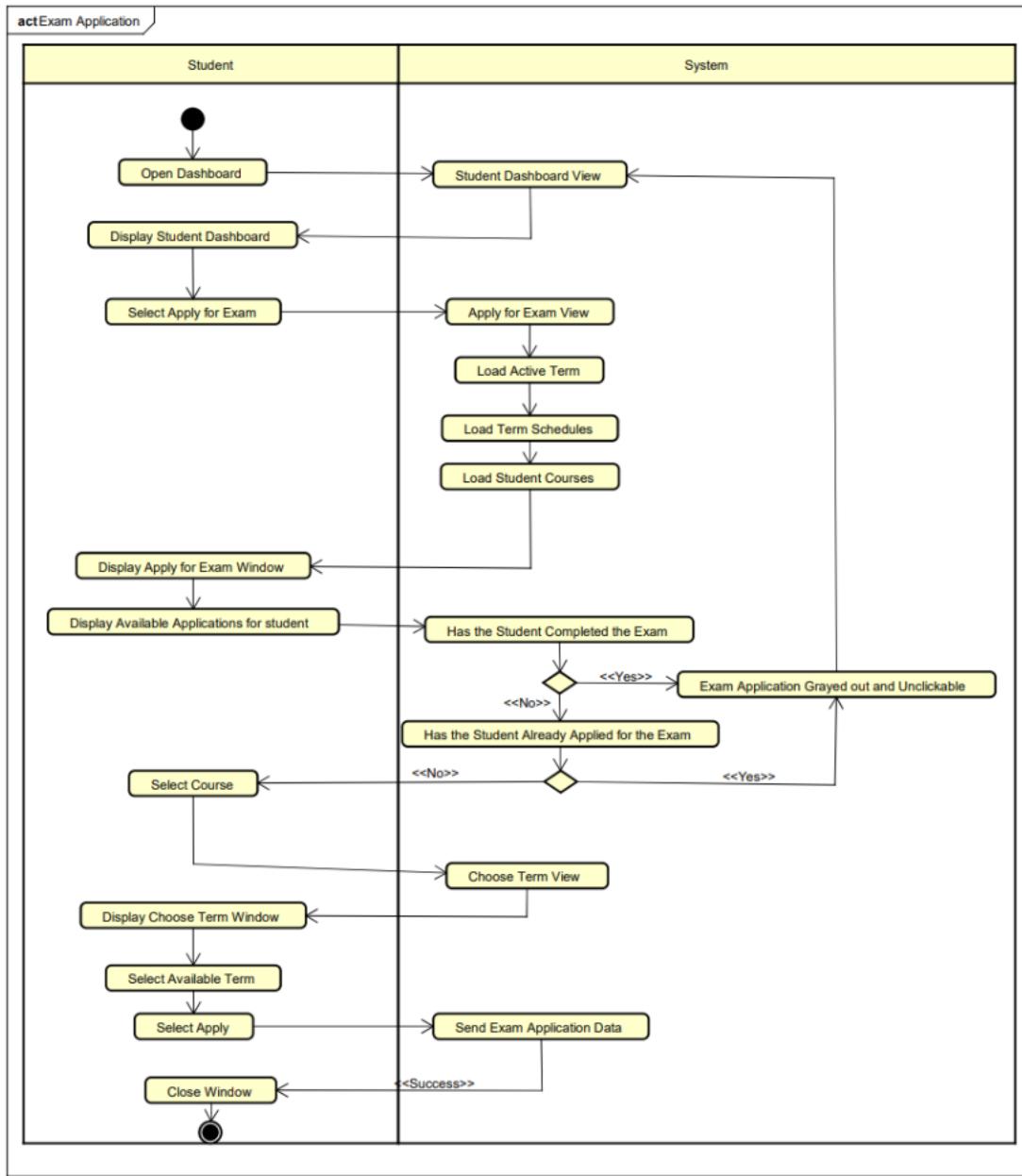
Sl. 4 - Dijagram aktivnosti registracije korisnika.



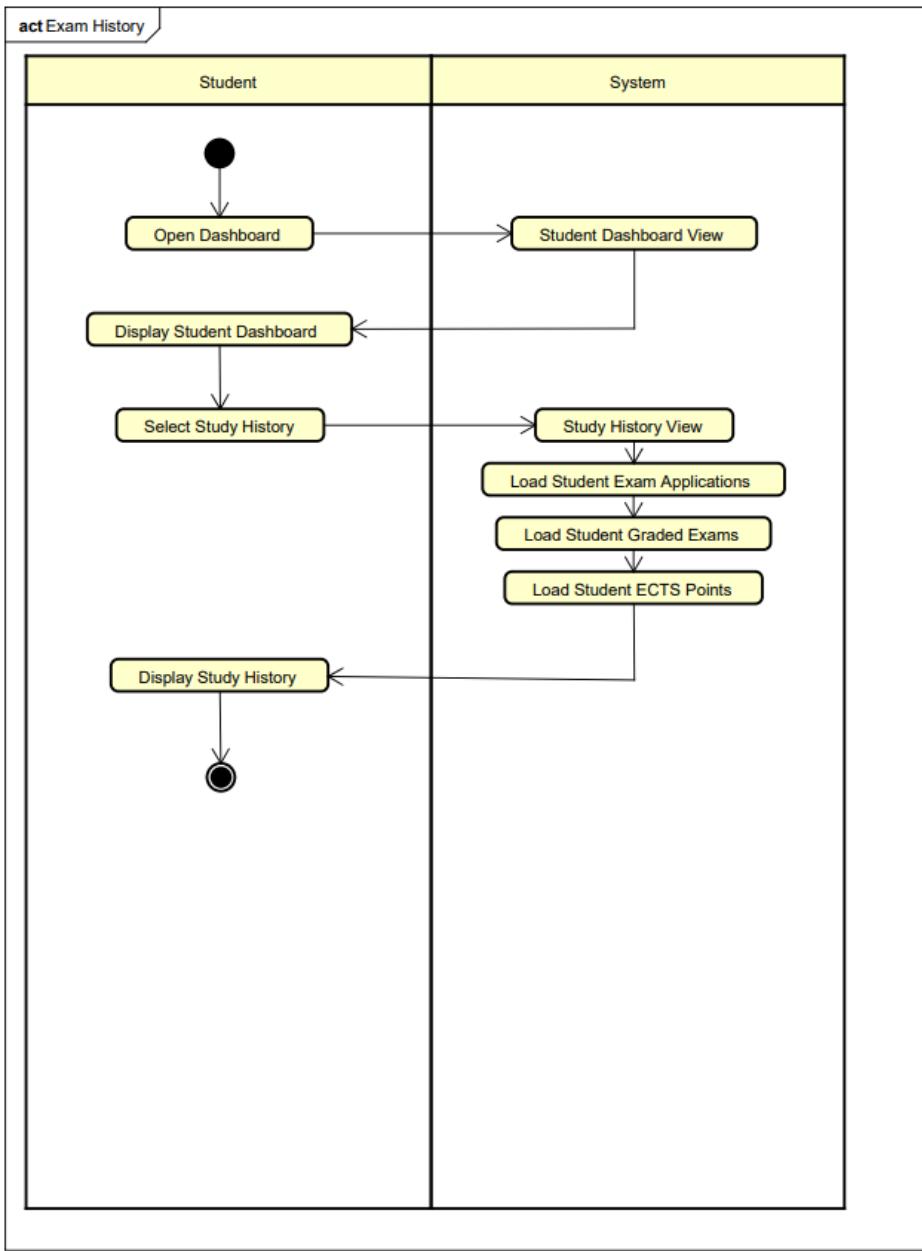
Sl. 5 – Dijagram aktivnosti upisa studenta na godinu.



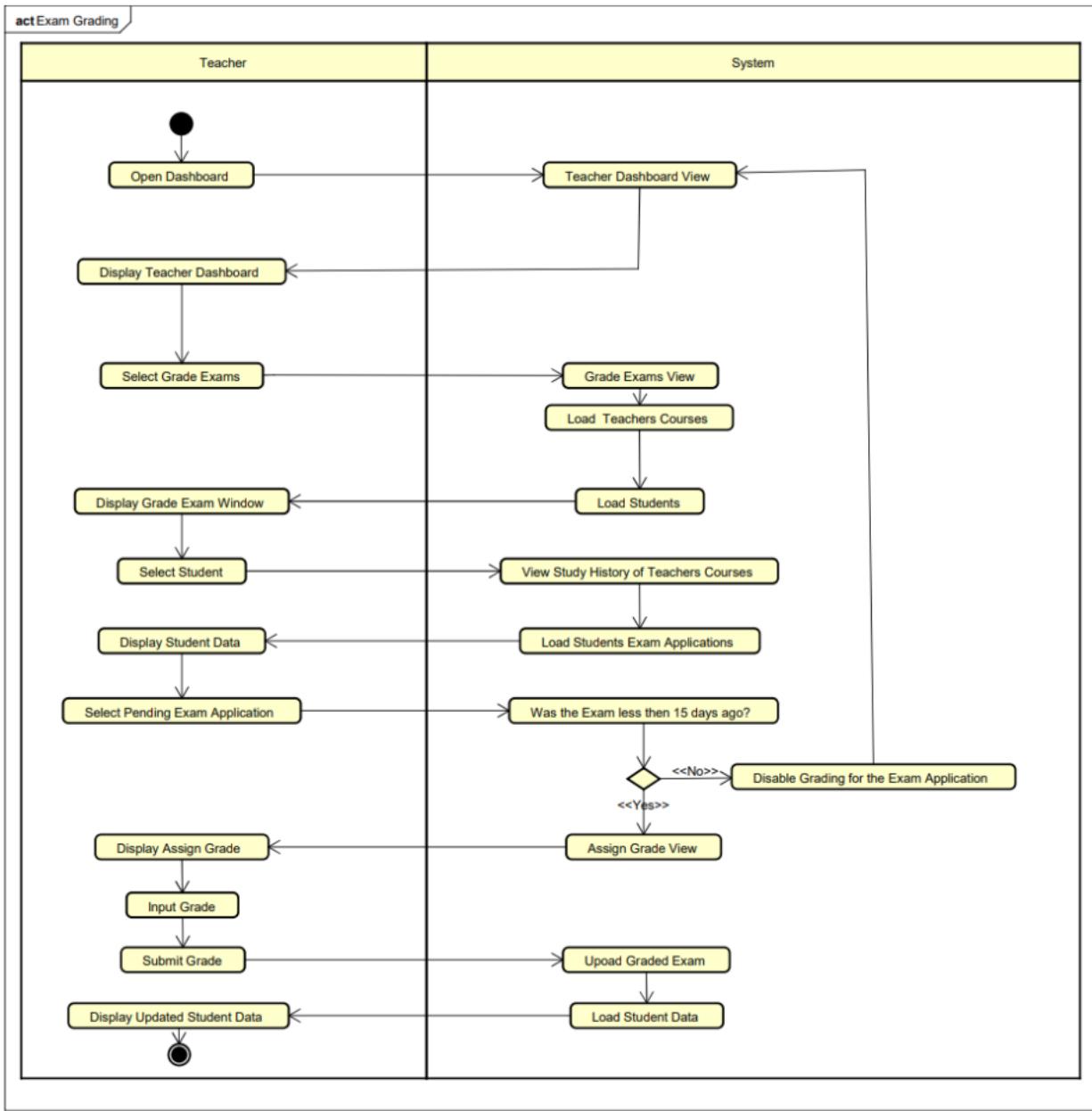
Sl. 6 – Dijagram aktivnosti pravljenja novog ispitnog termina.



Sl. 7 – Dijagram aktivnosti prijave ispita od strane studenta.



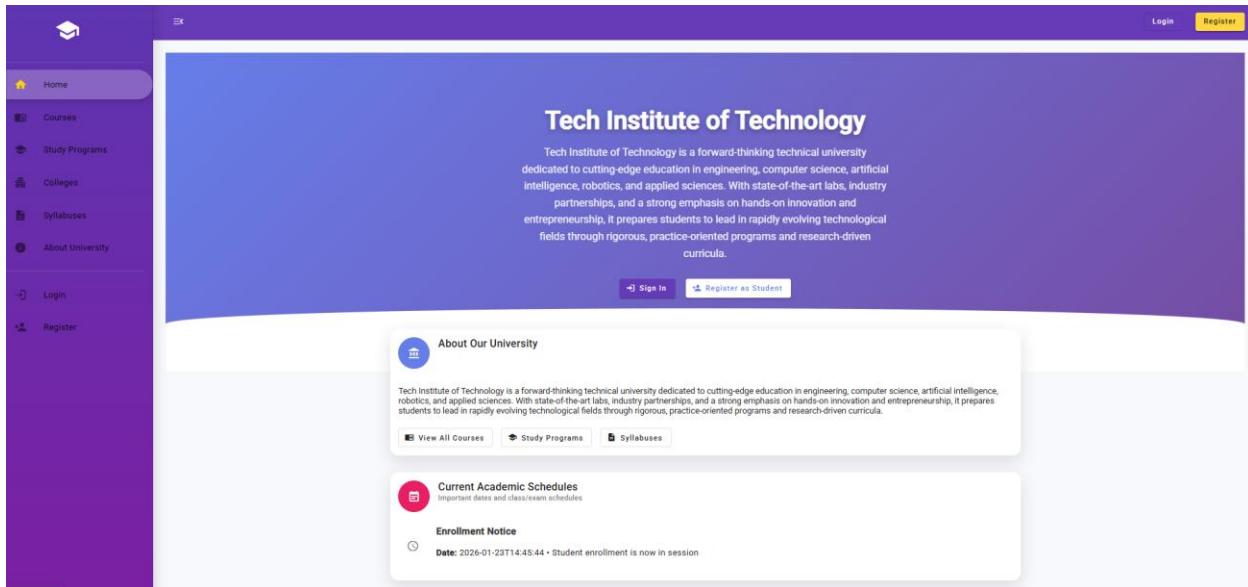
Sl. 8 – Dijagram aktivnosti pregleda istorije prijava ispita i polaganja ispita od strane studenta.



Sl. 9 – Dijagram aktivnosti ocenjivanja ispita od strane nastavnika.

Opis korišćenja

- Početna stranica aplikacije odakle neprijavljeni korisnici imaju mogućnosti pregledanja informacija o univerzitetu , da se prijave i da se registruju.



Sl. 10 – Naslovna stranica.

- Informacije o fakultetima se pristupa pritskom na taster “Colleges”, gde korisnik se informiše o fakultetima.

A screenshot of the "University Colleges" page. It features a title "University Colleges" at the top. Below it are five cards, each representing a different college:

- Technical College** (Tech Institute of Technology)
Address: Bulevar kralja Aleksandra 73, 11000 Belgrade, Serbia
Dean: Luis Martinez
- School of Engineering** (Tech Institute of Technology)
Address: Dr Ilije Đuričića 3, 21000 Novi Sad, Serbia
Dean: Emma Lopez
- College of Applied Technologies** (Tech Institute of Technology)
Address: Aleksandra Medvedeva 14, 18000 Niš, Serbia
Dean: John Thompson
- Technical Institute** (Tech Institute of Technology)
Address: Đura Jakšića 12, 34000 Kragujevac, Serbia
Dean: Not assigned
- Vocational Technical School** (Tech Institute of Technology)
Address: Imitrija Tučovića 15, 24000 Subotica, Serbia
Dean: Not assigned

Each card has a small circular icon with a right-pointing arrow in the bottom right corner.

Sl. 11 – Stranica fakulteta.

Daljim pritiskom na fakultetsku karticu se dobijaju detalji o samom fakultetu kao i smerovi koji se nalaze na njemu.

Technical College

College Information

University: Tech Institute of Technology

Address: Bulevar kralja Aleksandra 73, 11000 Belgrade, Serbia

Dean

Name: Luis Martinez

Username: teacher_luis

Email: luis.m@example.com

Role: TEACHER

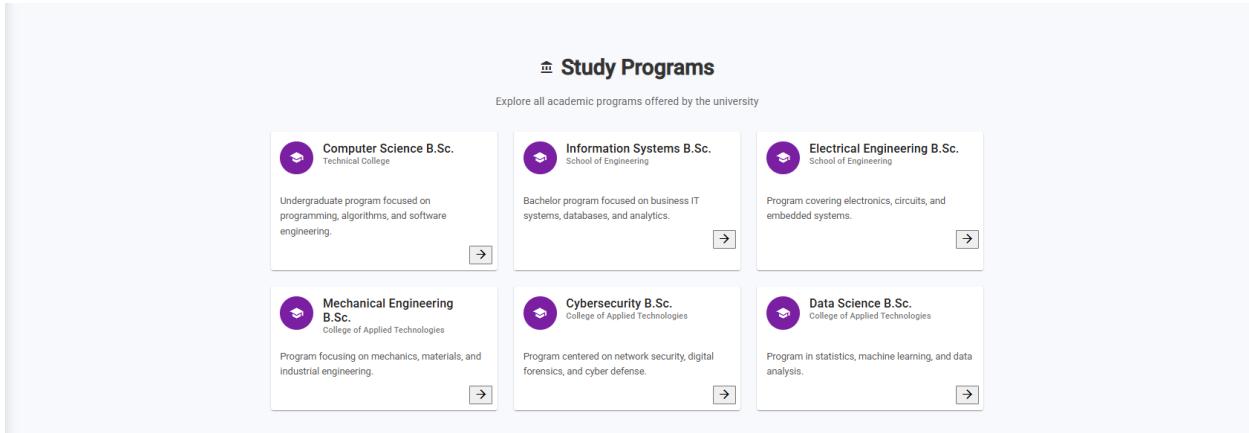
Study Programs

Name	Description
Computer Science B.Sc.	Undergraduate program focused on programming, algorithms, and software engineering.

[Close](#)

Sl. 12 – Detalji fakulteta.

- Pritiskom tastera “Study Programs” na početnoj stranici korisnik se prebacuje na stranicu sa detaljima Studijskih Programa.



The screenshot displays a grid of six study programs. Each program is represented by a purple circular icon with a graduation cap, followed by the program name and its details. To the right of each program is a small grey rectangular button with a right-pointing arrow.

Program	Description	Action
Computer Science B.Sc. Technical College	Undergraduate program focused on programming, algorithms, and software engineering.	View Details
Information Systems B.Sc. School of Engineering	Bachelor program focused on business IT systems, databases, and analytics.	View Details
Electrical Engineering B.Sc. School of Engineering	Program covering electronics, circuits, and embedded systems.	View Details
Mechanical Engineering B.Sc. College of Applied Technologies	Program focusing on mechanics, materials, and industrial engineering.	View Details
Cybersecurity B.Sc. College of Applied Technologies	Program centered on network security, digital forensics, and cyber defense.	View Details
Data Science B.Sc. College of Applied Technologies	Program in statistics, machine learning, and data analysis.	View Details

Sl. 13 – Stranica studijskih programa.

Pritiskom na karticu studijskog programa, korisniku se prikazuju dodatne informacije o izabranom programu zajedno sa listom predmeta.

Computer Science B.Sc.

Program Information

College: Technical College

Undergraduate program focused on programming, algorithms, and software engineering.

Courses in this Program

Course Name	Code	ECTS	Year	Teacher
Introduction to Programming	P1Y1C1	6	1	John Thompson
Discrete Mathematics I	P1Y1C2	6	1	John Thompson
Computer Architecture I	P1Y1C3	6	1	John Thompson
Calculus for Computer Science	P1Y1C4	6	1	John Thompson
Programming Lab I	P1Y1C5	6	1	John Thompson
Academic Skills for Computing	P1Y1C6	6	1	John Thompson
Data Structures	P1Y2C1	6	2	Emma Lopez
Algorithms I	P1Y2C2	6	2	Emma Lopez
Object-Oriented Programming	P1Y2C3	6	2	Emma Lopez
Discrete Mathematics II	P1Y2C4	6	2	Emma Lopez

[Close](#)

Sl. 14 – Detalji stdudijskih programa.

- Pritiskom tastera “Courses” sa početne stranice korsnik se prosledjuje na stranicu predmeta gde mu je data lista svih predmeta sa detaljima.

All Courses

Browse available courses in the university

 Introduction to Programming PIY1C1 • 6 ECTS Course 1 for year 1 of Computer Science B.Sc.	 Discrete Mathematics I PIY1C2 • 6 ECTS Course 2 for year 1 of Computer Science B.Sc.	 Computer Architecture I PIY1C3 • 6 ECTS Course 3 for year 1 of Computer Science B.Sc.
 Calculus for Computer Science PIY1C4 • 6 ECTS Course 4 for year 1 of Computer Science B.Sc.	 Programming Lab I PIY1C5 • 6 ECTS Course 5 for year 1 of Computer Science B.Sc.	 Academic Skills for Computing PIY1C6 • 6 ECTS Course 6 for year 1 of Computer Science B.Sc.
 Data Structures PIY2C1 • 6 ECTS Course 1 for year 2 of Computer Science B.Sc.	 Algorithms I PIY2C2 • 6 ECTS Course 2 for year 2 of Computer Science B.Sc.	 Object-Oriented Programming PIY2C3 • 6 ECTS Course 3 for year 2 of Computer Science B.Sc.
 Discrete Mathematics II PIY2C4 • 6 ECTS Course 4 for year 2 of Computer Science B.Sc.	 Probability & Statistics PIY2C5 • 6 ECTS Course 5 for year 2 of Computer Science B.Sc.	 Programming Lab II PIY2C6 • 6 ECTS Course 6 for year 2 of Computer Science B.Sc.
 Database Systems PIY3C1 • 6 ECTS Course 1 for year 3 of Computer Science B.Sc.	 Operating Systems PIY3C2 • 6 ECTS Course 2 for year 3 of Computer Science B.Sc.	 Computer Networks PIY3C3 • 6 ECTS Course 3 for year 3 of Computer Science B.Sc.

Sl. 15 – Stranica predmeta.

- Pritiskom tastera “Syllabuses” sa početne strane korisnik se prosledjuje na stranicu silabusa predmeta koji ih poseduju.

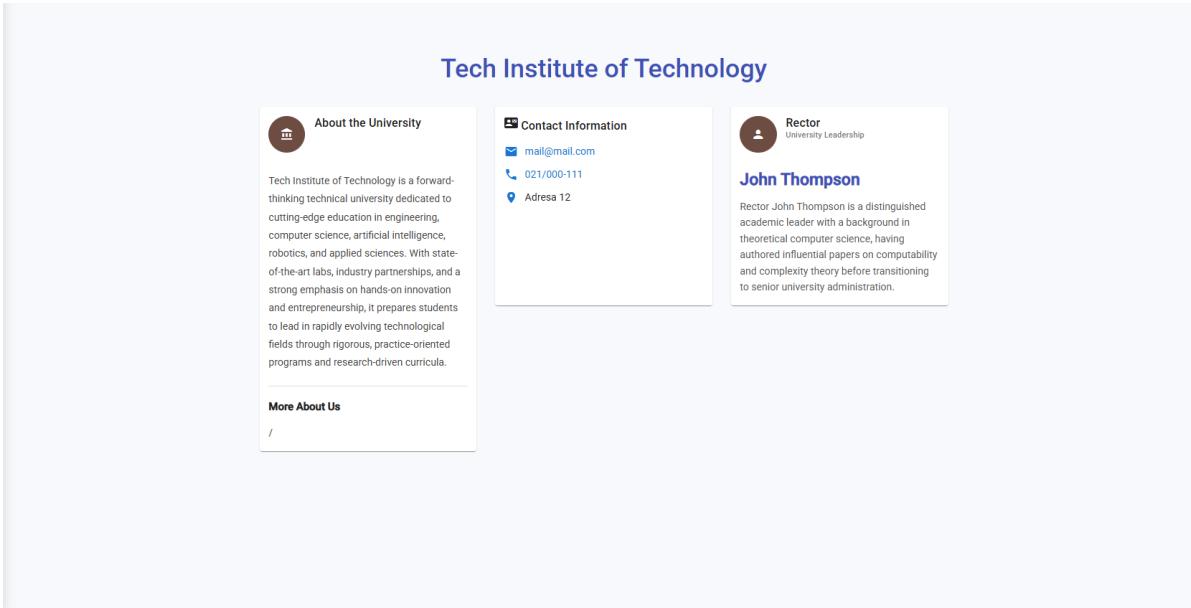
Course Syllabuses

Download official syllabuses for all courses

 Calculus for Computer Science Academic Year: 2025-2026	 Academic Skills for Computing Academic Year: 2025-2026	 Algorithms I Academic Year: 2025-2026
 Discrete Mathematics II Academic Year: 2025-2026	 Programming Lab II Academic Year: 2025-2026	 Operating Systems Academic Year: 2025-2026
 Software Engineering Academic Year: 2025-2026	 Human-Computer Interaction Academic Year: 2025-2026	 Compilers Academic Year: 2025-2026
 Advanced Algorithms Academic Year: 2025-2026	 Capstone Project in Computing Academic Year: 2025-2026	 Business Mathematics Academic Year: 2025-2026
 Introduction to Databases Academic Year: 2025-2026	 Academic & Research Skills Academic Year: 2025-2026	 Databases for Business Academic Year: 2025-2026
 Information Systems Modeling Academic Year: 2025-2026	 Project Management Basics Academic Year: 2025-2026	 Business Intelligence Academic Year: 2025-2026
 Information Security Management Academic Year: 2025-2026	 Systems Integration Academic Year: 2025-2026	 Advanced Database Applications Academic Year: 2025-2026
 E-Business & Digital Markets Academic Year: 2025-2026	 Capstone Project in IS Academic Year: 2025-2026	 Engineering Mathematics I Academic Year: 2025-2026

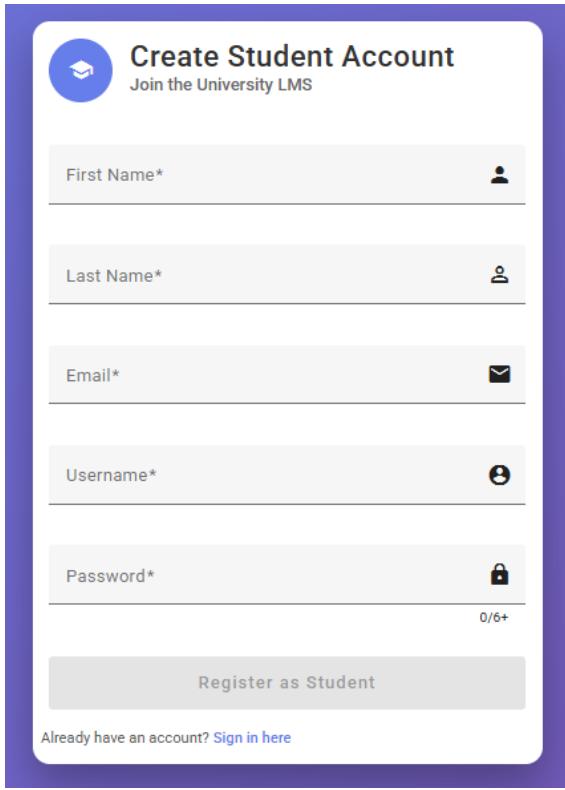
Sl. 16 – Stranica silabusa.

- Pritiskom tastera “About University” sa početne strane korisnik se prosledjuje na stranicu informacija o univerzitetu zajedno sa informacijama rektora.



Sl. 17 – Stranica “About University”.

- Registracija se vrši pritiskom na taster “Register” gde korisnik biva prosledjen na formular za pravljenje novog registrovanog korisnika.



The image shows a mobile-style registration form titled "Create Student Account" with a sub-instruction "Join the University LMS". The form consists of five input fields: "First Name*" with a person icon, "Last Name*" with a person icon, "Email*" with an envelope icon, "Username*" with a user icon, and "Password*" with a lock icon. Below the password field is a character count "0/6+". At the bottom is a grey button labeled "Register as Student". At the very bottom, there is a link "Already have an account? [Sign in here](#)".

Sl. 18 – Formular za registraciju korisnika.

Novi korisnik ima ulogu (Role) “UNASSIGNED” , dok mu osoblje (STAFF) ne izmeni trenutnu ulogu.

- Registrovani korisnici mogu da se prijave na sistem pritiskom na taster “Login” koji će proslediti korisnika na formular za prijavu korisnika.

Welcome Back!

Log in to your University LMS account

Username*

Password*

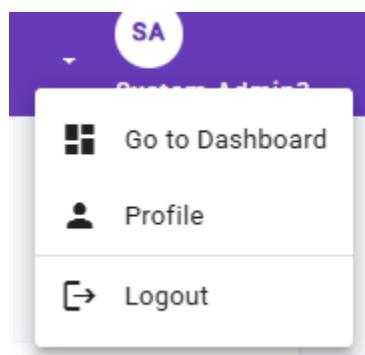
SIGN IN

Don't have an account? [Register here](#)

Sl. 19 – Formular za prijavu korisnika.

U slučaju da korisnik nema napravljen nalog , može kreirati novi pritiskom na “Register here” obeleženo plavim slovima.

- Prijavom na sistem korisnici mogu da :
 1. Izaberu opciju da odu na Dashboard stranicu sa mogućnostima svoje uloge.
 2. Izaberu obciju da odu na Profilnu stranicu da izmene detalje o svom profilu.
 3. I da se odjave sa sistema.



Sl. 20 – Opcije korisnika nakon prijave.

- Pritiskom tastera “Profile” korisniku se otvara formular za izmenu svojih informacija , gde pritiskom na taster “Save Changes” će se primeniti napravljene izmene.

The screenshot shows a user profile editing interface. At the top, it says "User Profile" and "Edit your personal information". There is a field labeled "Email*" containing "alex1@student.com". Below that are two fields: "First Name" with "Alex" and "Last Name" with "Johnson". At the bottom right is a purple "Save Changes" button.

Sl. 21 – Formular za izmenu profila prijavljenih korinika.

- Pritiskom na taster “Go To Dashboard” korisnik se preusmerava na stranicu koja poseduje funkcije korisnikove uloge.(ADMIN, STAFF, TEACHER, STUDENT)

Dashboard stranica uloga

1. Administrator (ADMIN):

The screenshot shows the Admin Dashboard with the following sections:

- Manage Users:** 36 user(s). Create, edit, and delete system users (Admin, Teacher, Student).
- Study Programs:** 6 program(s). Create and manage academic study programs.
- Courses:** 144 course(s). Manage courses and assign them to study programs.
- Syllabuses:** 74 document(s). Upload and manage course syllabuses.
- Colleges:** 5 college(s). Create and manage university colleges/faculties.
- University Settings:** Institution information & contact. Includes fields for Name, Description, Contact, Location, and Rector.

At the bottom right, there is a yellow button labeled "Export All Users to PDF" and a purple "Edit Settings" button.

Sl.22 - stranica Admin Dashboard.

Administrator poseduje navedene mogućnosti:

1. Upravlja korisnicima (Manage Users)
 2. Upravlja studijskim programima (Study Programs)
 3. Upravlja predmetima (Courses)
 4. Upravlja silabusima (Syllabuses)
 5. Upravlja fakultetima (Colleges)
 6. Podešavanja univerziteta (University Settings)
 7. Eksportuje sve korisnike na PDF (Export All Users to PDF)
- Pritiskom na taster “Manage Users” otvara se prozor za upravljanje korisnicam.

Username	Email	First Name	Last Name	Index	Role	Actions
admin	A@a.a	Admir	Adminov	None	ADMIN	
admin2	admin2@example.com	System	Admin3		ADMIN	
teacher_john	john.t@example.com	John	Thompson		TEACHER	
teacher_emma	emma.l@example.com	Emma	Lopez		TEACHER	
teacher_mike	mike.r@example.com	Michael	Reynolds		TEACHER	
teacher_sara	sara.k@example.com	Sara	Keller		TEACHER	
teacher_luis	luis.m@example.com	Luis	Martinez		TEACHER	
staff_anna	anna.staff@example.com	Anna	Peterson		STAFF	
staff_paul	paul.staff@example.com	Paul	Bennett		STAFF	
staff_julia	julia.staff@example.com	Julia	Kramer		STAFF	
staff_mark	mark.staff@example.com	Mark	Henderson		STAFF	

Sl. 23 – Manage Users prozor (Admin Dashboard).

Pritiskom na taster “Create New User” Administrator može da kreira novog korisnika u sledećem formularu. Koji se pojavljuje odmah ispod tastera.

Create New User			
Username*	Email*	First Name*	Last Name*
Index Number*	Password*	Role*	

Sl. 24 – Formular za kreaciju novih korisnika od strane Administratora.

Pritiskom na taster Save User , novi korisnik je kreiran i sačuvan. Taster je siv i ne može da se pritisne ukoliko sva polja nisu popunjena.

Pritiskom na taster Cancel se uklanja forumlar gde će stranica ponovo izgledati kao na slici br. 23

- Sa slike 23. Nakon izabranog korisnika kojeg želimo da izmenimo:

teacher_john john.t@example.com John Thompson TEACHER

Sl. 25 – Primer izabranog korisnika

Imamo opcije da izmenimo korisnika pritiskom na ikonicu olovke . Gde će se pojaviti formular za izmenu korisnika.

Username*	Email*	First Name*	Last Name*
admin	A@a.a	Admir	Adminov
Index Number*	Role*		
None	Admin		
<input type="button" value="Update User"/> <input type="button" value="Cancel"/>			

Sl. 26 – Formular za izmenu korisnika od strane Administratora.

Gde imamo mogućnosti da izmenimo bilo koji od navedenih parametara:
Username(Korisničko Ime), Email, First Name(Ime), Last Name(Prezime), Intex Number(Broj Indeksa), Role(Uloga)

Nakon izmena možemo da pritisnemo taster Update User koja će primeniti napravljane izmene.

Pritiskom tastera Cancel uklanja se formular i stranica će ponovo izgledati kao na slici br. 23.

Sa slike br. 25 nakon izabranog korisnika , možemo da pritisnemo taster crvene kante , koja obeležava brisanje korisnika nakon pritiska tastera otvara nam se obaveštenje koje nas pita da li želimo da uklonimo korisnika.



Sl. 27 – Obaveštenje za uklanjanje korisnika.

Potvrdom ovog obaveštenja korisnik biva obrisan sa sistema.

- Pritiskom tastera Study Programs se otvara prozor za upravljanjem studijskih programa.

Manage Study Programs

Program Name*	Description (optional)	College*
---------------	------------------------	----------

[Create Program](#) [Cancel](#)

Name	College	Description	Actions
Computer Science B.Sc.	Technical College	Undergraduate program focused on programming, algorithms, and software engineering.	
Information Systems B.Sc.	School of Engineering	Bachelor program focused on business IT systems, databases, and analytics.	
Electrical Engineering B.Sc.	School of Engineering	Program covering electronics, circuits, and embedded systems.	
Mechanical Engineering B.Sc.	College of Applied Technologies	Program focusing on mechanics, materials, and industrial engineering.	
Cybersecurity B.Sc.	College of Applied Technologies	Program centered on network security, digital forensics, and cyber defense.	
Data Science B.Sc.	College of Applied Technologies	Program in statistics, machine learning, and data analysis.	

[Close](#)

Sl. 28 Study Programs prozor (Admin Dashboard).

Na početku stanice se nalazi formular za pravljenje novih programa . Dok se ne popune sva polja taster Create Program će biti siv i neće moći da se pritisne. Pritiskom Create Program tastera nakon popunjavanja polja će se uneti novi program u sistem. Pritiskom tastera Cancel će se ukloniti svi trenutni unosi u polja formulara.

Pritiskom na ljubičastu olovku sa slik br. 28 formular za kreaciju studijskog programa sa iste slike se menja u formular za izmenu programa.

Manage Study Programs

Program Name* Computer Science B.Sc.	Description (optional) Undergraduate program focused on programming, algorithms, and software engineering.	College* Technical College (Tech Institute of ...)
---	---	---

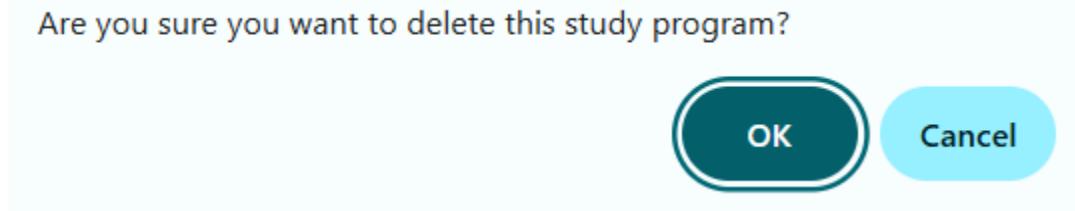
[Update Program](#) [Cancel](#)

Sl. 29 – Formular izmene programa od strane Administratora.

Pritiskom na taster Update Program će u sistemu napraviti izmene na studijski program koji je izabran.

Taster Cancel će vratiti formular za izmenu ponovo na formular za kreaciju novih studijskih programa . Ponovo izgledajući kao na slici 28.

Pritisom na taster crvene kante se bira opcija za brisanje studijskog programa sa sistema. Gde se pojavljuje obaveštenje.



Sl. 30 - Obaveštenje za uklanjanje studijskog programa.

Potvrđivanjem ovog obaveštenja se uklanja stavka sa sistema.

- Pritisom tastera Manage Courses se otvara prozor za upravljanje predmeta.

A screenshot of the "Manage Courses" window. At the top, there are input fields for "Course Name*", "Course Code*", "ECTS Points*" (set to 6), and "Study Program*". Below these are dropdowns for "Study Year*" and "Assigned Teacher", and a text area for "Description (optional)". A note says "Courses will be visible to students in this year". At the top right are "Create Course" and "Cancel" buttons. The main area is a table with columns: Name, Code, ECTS, Program, Year, Teacher, and Actions (with edit and delete icons). The table contains six rows of course data. At the bottom right is a "Close" button.

Sl. 31 – Manage Courses prozor (Admin Dashboard).

Na početku stanice se nalazi formular za pravljenje Predmeta . Dok se ne popune sva polja taster Create Course će biti siv i neće moći da se pritisne. Pritisom Create Course tastera nakon popunjavanja polja će se uneti novi program u sistem.

Pritisom tastera Cancel će se ukloniti svi trenutni unosi u polja formulara.

Pritisom na ljubičastu olovku sa slik br. 31 formular za kreaciju Predmeta sa iste slike se menja u formular za izmenu Predmeta.

Manage Courses

Course Name*	Course Code*	ECTS Points*	Study Program*
Introduction to Programming	P1Y1C1	6	Computer Science B.Sc.
Study Year*	Assigned Teacher	Description (optional)	
Year 1	John Thompson (teacher_john)	Course 1 for year 1 of Computer Science B.Sc.	
Courses will be visible to students in this year			
Update Course Cancel			

Sl. 32 – Formular za izmenu predmeta od strane Administratora.

Pritiskom na taster Update Course će u sistemu napraviti izmene na Predmet koji je izabran.

Taster Cancel će vratiti formular za izmenu ponovo na formular za kreaciju novih predmeta . Ponovo izgledajući kao na slici 31.

Pritiskom na taster crvene kante se bira opcija za brisanje predmeta sa sistema. Gde se pojavljuje obaveštenje.

Are you sure you want to delete this course?



Sl. 33 - Obaveštenje za uklanjanje predmeta.

Potvrđivanjem ovog obaveštenja se uklanja stavka sa sistema.

- Pritiskom tastera Syllabuses se otvara prozor za upravljanje silabusima.

Manage Syllabuses

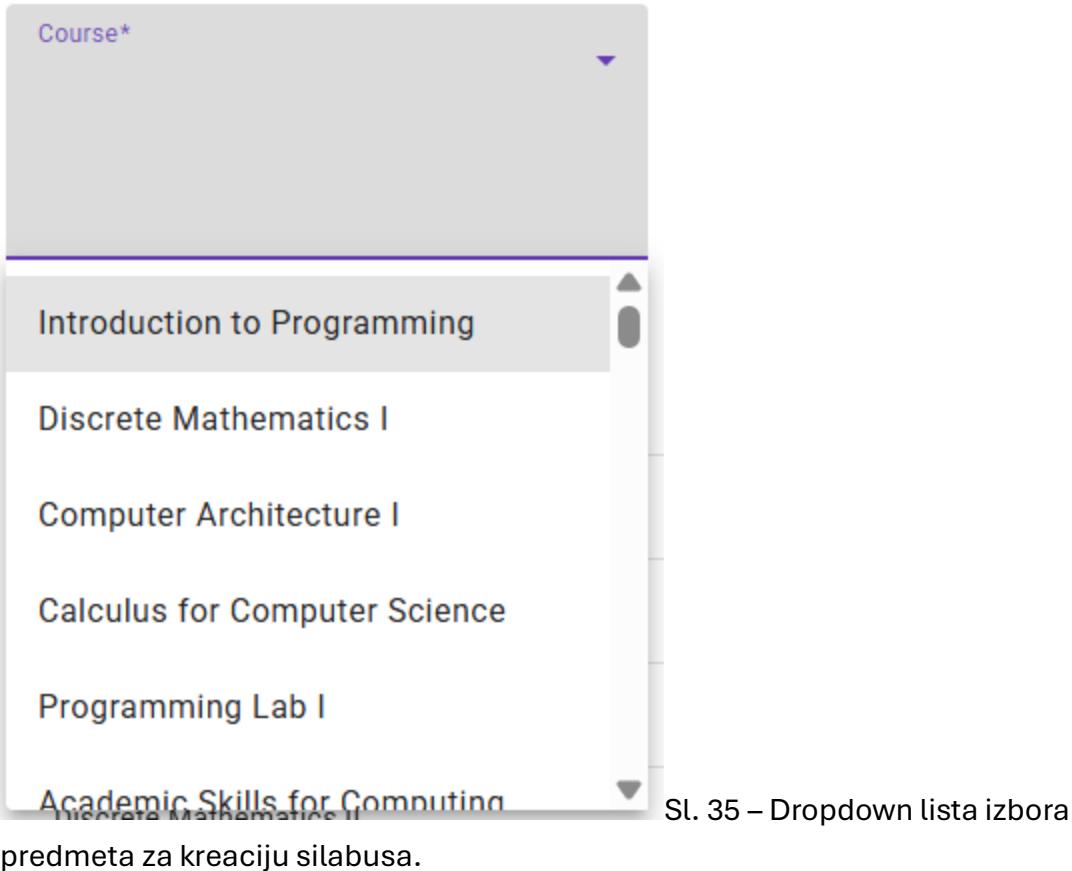
Course*	Academic Year*	Content (PDF URL or text)*	Create Syllabus

Course	Year	
Calculus for Computer Science	2025-2026	
Academic Skills for Computing	2025-2026	
Algorithms I	2025-2026	
Discrete Mathematics II	2025-2026	
Programming Lab II	2025-2026	
Operating Systems	2025-2026	
Software Engineering	2025-2026	
Human-Computer Interaction	2025-2026	

Close

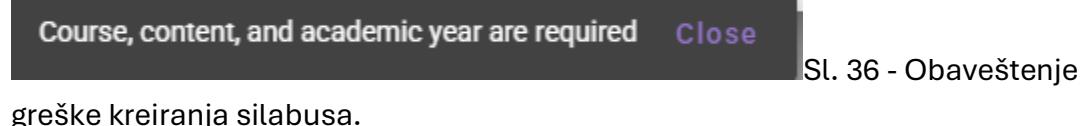
Sl. 34 – Manage Syllabus prozor (Admin Dashboard).

Na početku stanice se nalazi formular za pravljenje silabusa.
Prvo se bira predmet silabusa iz liste postojećih predmeta.

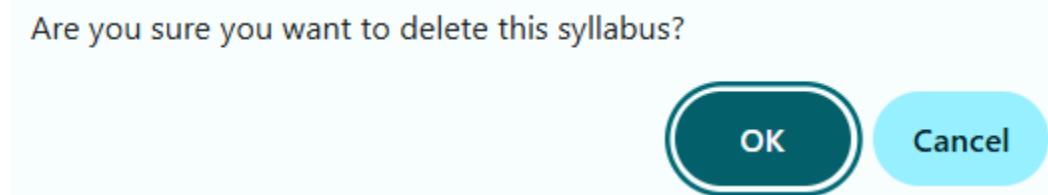


Zatim se popunjavaju ostala polja Akademska goidna i Sadržaj(Content).

Nakon koje može da se pritisne taster Create Syllabus. Pritiskom tastera pre popunjениh svih polja će napraviti notifikaciju na dnu ekrana



Pritiskom na taster crvene kante sa slike 34. se bira opcija za brisanje izabranog silabusa sa sistema. Gde se pojavljuje obaveštenje.



Sl. 37 - Obaveštenje za uklanjanje silabusa.

Potvrđivanjem ovog obaveštenja se uklanja stavka sa sistema.

- Pritiskom tastera Colleges se otvara prozor za upravljanje fakultetima.

Manage Colleges

College Name*	Dean User ID*	Address*	University Name*
Technical College	0	The user ID of the dean (must exist as ADMIN or TEACHER)	

Create College Cancel

Name	University	Address	Actions
Technical College	Tech Institute of Technology	Bulevar kralja Aleksandra 73, 11000 Belgrade, Serbia	
School of Engineering	Tech Institute of Technology	Dr Ilije Đuričića 3, 21000 Novi Sad, Serbia	
College of Applied Technologies	Tech Institute of Technology	Aleksandra Medvedeva 14, 18000 Niš, Serbia	
Technical Institute	Tech Institute of Technology	Đura Jakšića 12, 34000 Kragujevac, Serbia	
Vocational Technical School	Tech Institute of Technology	imitrija Tucovića 15, 24000 Subotica, Serbia	

Close

Sl. 38 – Manage Colleges prozor(Admin Dashboard)

Na početku stanice se nalazi formular za pravljenje fakulteta. Dok se ne popune sva polja taster Create College će biti siv i neće moći da se pritisne.

Pritiskom Create College tastera nakon popunjavanja polja će se uneti novi fakulteti u sistem.

Pritiskom tastera Cancel će se ukloniti svi trenutni unosi u polja formulara.

Pritiskom na ljubičastu olovku sa slik br. 38 formular za kreaciju fakulteta sa iste slike se menja u formular za izmenu fakulteta.

College Name*	Dean User ID*	Address*	University Name*
Technical College	41	Bulevar kralja Aleksandra 73, 11000 Be	Tech Institute of Technology
The user ID of the dean (must exist as ADMIN or TEACHER)			
		Update College Cancel	

Sl.39 - Formular za izmenu fakulteta od strane Administratora.

Pritisom na taster Update College će u sistemu napraviti izmene na fakultet koji je izabran.

Taster Cancel će vratiti formular za izmenu ponovo na formular za kreaciju novih fakulteta. Ponovo izgledajući kao na slici 38.

Pritisom na taster crvene kante se bira opcija za brisanje fakulteta sa sistema. Gde se pojavljuje obaveštenje.

Delete this college? This may affect study programs.



Sl. 40 - Obaveštenje za ukidanje fakulteta.

Potrdjivanjem ovog obaveštenja se uklanja stavka sa sistema.

- Pritisom tastera University Settings se otvara prozor za upravljanje univerziteta.

University Settings

Basic University Information

University Name*	Short Description
Tech Institute of Technology	Tech Institute of Technology is a forward-thinking technical university dedicated to cutting-edge education in engineering, computer science, artificial

[Save Basic Info](#)

Contact & Additional Details

Contact Email mail@mail.com	Contact Phone 021/000-111
Location / Address Adresa 12	Full Description /

[Close](#)

Sl. 41 – University Settings prozor, prvi deo (Admin Dashboard).

U prvom delu prozora (Basic University Information) se nalaze stavke koje se prikazuju na početnoj stranici aplikacije. Izmenom bilo koje od stavki ovog dela će promeniti sivi taster Save Basic Info u ljubičast. Pritiskom tog tastera će primeniti promene koje su napravljene.

U drugom delu prozora (Contact & Additional Details):

Contact & Additional Details

Contact Email
mail@mail.com

Contact Phone
021/000-111

Location / Address
Adresa 12

Full Description
/

Rector Information

Rector Description
Rector John Thompson is a
distinguished academic leader with a
background in theoretical computer

Rector Name
John Thompson

Update Details

Close

Sl. 42 - University Settings prozor, drugi deo (Admin Dashboard).

Korisnik menja informacije koje se nalaze na “About University” stranici.

Pritiskom tastera Update Details će primeniti promene u sistemu.

- Pritiskom tastera Export All Users to PDF sa slike br. 22 će napraviti PDF sa informacijama korisnika.

Users Report

ID: 1

Username: admin

Email: A@a.a

Role: ADMIN

First Name: Admir

Last Name: Adminov

Index Number: None

ID: 36

Username: admin2

Email: admin2@example.com

Role: ADMIN

First Name: System

Last Name: Admin3

Index Number:

ID: 37

Username: teacher_john

Email: john.t@example.com

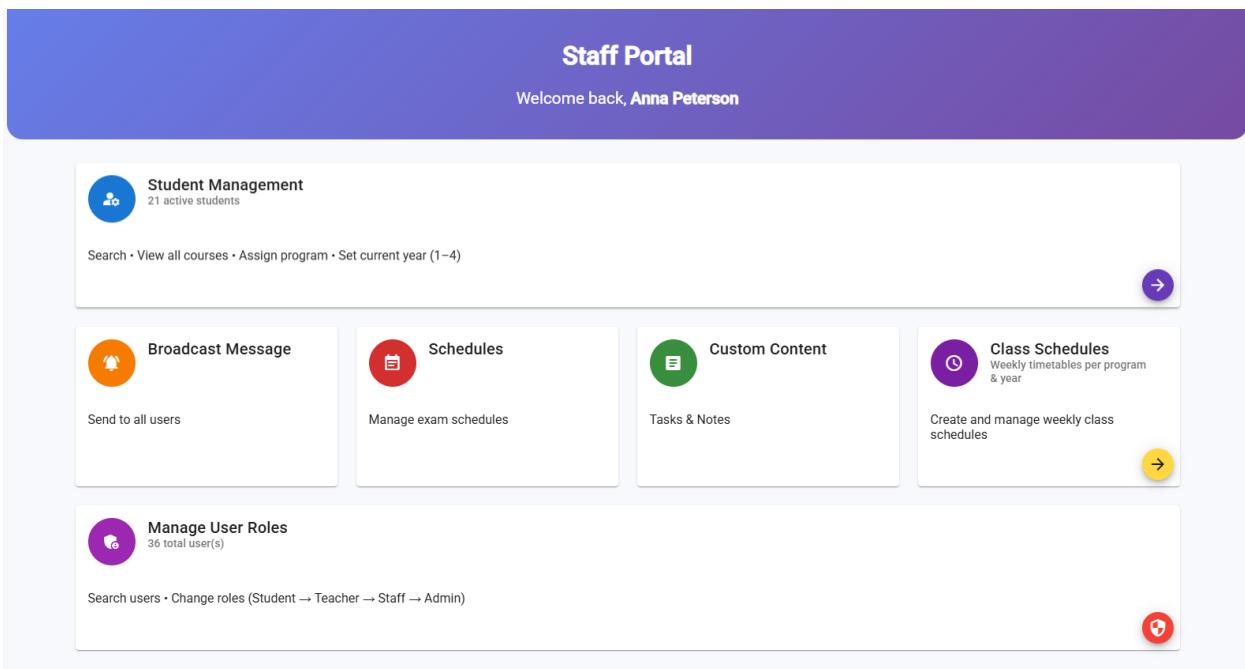
Role: TEACHER

First Name: John

Last Name: Thompson

Sl. 43 – Primer Napravljenog PDF-a.

2. Osoblje (STAFF):



Sl. 44 – Stranica Staff Dashboard

Osoblje poseduje navedene mogućnosti:

1. Upravljanje Studentima(Student Management)
 2. Pravljenje Obaveštenja (Brodcast Message)
 3. Upravljanje Rasporeda(Schedules)
 4. “Custom Content”
 5. Raspored Predavanja(Class Schedules)
 6. Upravljanje Uloga Korisnika(Manage User Roles)
- Pritiskom tastera Student Management se otvara prozor za upravljanje studenata.

Student Management

Name	Index Number	Actions			
Alex Johnsonalex1@student.com	202501				
Mia Williamsmia2@student.com	2025002				
Luke Brownluke3@student.com	2025003				
Ryan Davisryan5@student.com	2025005				
Lily Garcia{lily6@student.com}	2025006				
Noah Rodrigueznoah7@student.com	2025007				
Ava Wilsonava8@student.com	2025008				
Oliver Martinezoliver9@student.com	2025009				

Sl. 45 – Student Management prozor (Staff Dashboard)

Na početku prozora se nalazi pretraga po imenu, email-u ili broju indeksa.

Nakon unosa informacije će prikazati sve korisnike sa poklapajućim parametrima.

Student Management

Name	Index Number	Actions			
Mia Williamsmia2@student.com	2025002				

Sl. 46 – Prikaz pretrage studenata.

Pritiskom tastera editi izabranog studenta otvara novi prozor.

Edit Student: Mia Williams

Index Number

Index Number

2025002

Save Index Number

Enroll in Academic Year

Academic Year

Year 1

Date of Enrollment

23/01/2026

Study Program

Computer Science B.Sc.

Save Year Enrollment

Enrolled Academic Years

No year enrollments yet.

Add Course

[Close](#)

Sl. 47 – Prozor za izmenu studentskih detalja od strane osoblja(Staff)

U ovom prozoru korisnik ima sledeće mogućnosti izmene studenta.

-Može da izmeni broj indeksa.

Nakon pritiska Save Index Number će se primeniti izmena i sačuvati u sistem.

-Može da se izvrši upis u godinu.

Izborom godine i studijskog programa, korisnik može da pritisne Save Year

Enrollment taster koji će primeniti upis na izabranog studenta.

-Može da pregleda predhodne upise.

Add Course

Select Course

Add Course

Currently Enrolled Courses

Introduction to Programming (P1Y1C1) 6 ECTS 

Discrete Mathematics I (P1Y1C2) 6 ECTS 

Computer Architecture I (P1Y1C3) 6 ECTS 

Calculus for Computer Science (P1Y1C4) 6 ECTS 

Programming Lab I (P1Y1C5) 6 ECTS 

Academic Skills for Computing (P1Y1C6) 6 ECTS 

Introduction to Programming (P1Y1C1) 6 ECTS 

Close

Sl. 48 – Prozor za dodavanje predmeta studentima od strane osoblja (Staff)

-Može da upiše studenta na pohadjanje predmeta. U add Course Opciji.

Introduction to Programming (P1Y1C1) – 6 ECTS

Discrete Mathematics I (P1Y1C2) – 6 ECTS

Computer Architecture I (P1Y1C3) – 6 ECTS

Calculus for Computer Science (P1Y1C4) – 6 ECTS

Programming Lab I (P1Y1C5) – 6 ECTS

Academic Skills for Computing (P1Y1C6) – 6 ECTS

Sl. 49 – Dropdown lista za dodavanje Studijskih Programa studentu od strane osoblja (Staff).

Gde će se pojaviti lista predmeta.

-Može da ukloni predmete koje student pohadja.

Sa pritiskom na taster crvene kante.

Sa slike 45. Izabranog studenta, pritiskom tastera PDF će formirati fajl sa informacijama o o Studijama izabranog studenta.

Student Academic Profile

Personal Information

Name: Mia Williams

Email: mia2@student.com

Index Number: 2025002

Enrolled Academic Years

No year enrollments recorded.

Currently Enrolled Courses

- Introduction to Programming (P1Y1C1) – 6 ECTS
- Discrete Mathematics I (P1Y1C2) – 6 ECTS
- Computer Architecture I (P1Y1C3) – 6 ECTS
- Calculus for Computer Science (P1Y1C4) – 6 ECTS
- Programming Lab I (P1Y1C5) – 6 ECTS
- Academic Skills for Computing (P1Y1C6) – 6 ECTS

Sl.50 - Primer PDF-a sa

detaljima studiranja studenta.

Sa slike 45. Izabranog studenta, pritiskom na taster Grades PDF će formirati fajl sa informacijama o istoriji polaganja studenta.

Mia Williams – Exam Grades History

Index: 2025002 | Email: mia2@student.com

Introduction to Programming (P1Y1C1)

Term: Summer C 2025 (ID: 7)

Grade not yet assigned

Discrete Mathematics I (P1Y1C2)

Term: Summer C 2025 (ID: 7)

Grade: 7.0 | Attempts: 1

Computer Architecture I (P1Y1C3)

Term: Summer C 2025 (ID: 7)

Grade: 7.0 | Attempts: 1

Sl. 51 – Primer PDF-a sa

istorijom polaganja za studente.

Sa slike 45. Izabranog studenta, pritiskom na taster Upload Grades XML, gde možemo prevući formirani XML fajl sa informacijama polaganja studenta.

Upload Exam Grades XML for



Drag & drop XML file here

or

Select XML File

Back

Upload & Process

Sl.52 - Prozor za dodavanje XML fajla sa informacijama polaganja ispita studenta.

```
<?xml version="1.0" encoding="UTF-8"?>
<examData>
    <application term="Winter 2025" courseCode="P1Y1C1">
        <grade value="6.0" attempts="2" />
    </application>

    <application term="Summer A 2025" courseCode="P2Y2C1">
        <grade value="9.0" attempts="1" />
    </application>

    <application term="Winter 2025" courseCode="P1Y1C2">
        <grade value="8.0" attempts="3" />
    </application>

    <application term="Summer B 2025" courseCode="P1Y2C1">
        <grade value="abc" attempts="1" />
    </application>
</examData>
```

Sl 53. Izgled XML fajla koji može da se ubaci.

- Pritiskom tastera Broadcast Message, omogućava korisniku da napravi notifikacije za ostale korisnike.

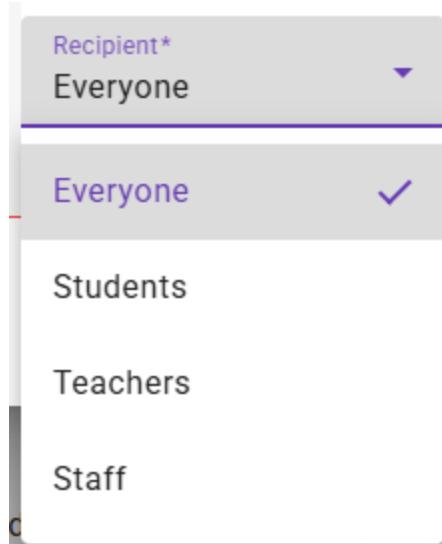
Send Notification

The screenshot shows a user interface for sending a broadcast message. At the top, there's a title 'Send Notification'. Below it is a 'Title' input field containing 'Title'. To the right is a 'Recipient*' dropdown menu set to 'Everyone'. A large text area for the message content is partially visible. At the bottom right are two buttons: 'Send' and 'Cancel'.

Sl. 54 – Formular kreacije obaveštenja od strane osoblja (Staff)

Obaveštenje ima naziv, sadržaj i primaoca.

Primaoc se bira od uloga koje postoje u sistemu.



Sl. 55 – Dropdown lista uloga kojima obaveštenja mogu biti prosledjena.

Nakon formiranja obaveštenja i popunjavanja svih polja Send dugme postaje ljubičasto i može da se pritisne . Što će proslediti poruku ostalim korisnicima.

- Pritiskom tastera Schedules, omogućava korisniku da formira raspored ispitnih rokova.

Academic Calendar & Schedules

Academic Terms		Term Schedule Editor	View All Schedules
Term	Duration		
Winter 2025	10/01/2025 – 30/01/2025		
Spring A 2025	10/02/2025 – 28/02/2025		
Spring B 2025	10/03/2025 – 30/03/2025		
Spring C 2025	12/04/2025 – 30/04/2025		
Summer A 2025	10/05/2025 – 29/05/2025		
Summer B 2025	08/06/2025 – 28/06/2025		
Summer C 2025	10/07/2025 – 30/07/2025		
Novembar 1 Term	01/11/2025 – 30/11/2025		
Januar	30/12/2025 – 31/01/2026		
Januar2	01/01/2026 – 01/02/2026		

Sl. 56 - Prozor Academic Calendar & Schedules (Staff Dashboard)

Pritiskom tastera Create New Term otvara formular na početku stranice gde korisnik unosi informacije vezane za ispitni rok.

Term Name*

Start Date*
dd/mm/yyyy

End Date*
dd/mm/yyyy

Description

Set as Active Term

Sl. 57 – Formular za kreaciju ispitnih rokova od strane osoblja (Staff).

Izbor aktivnog roka obeleženim otkačajem kućice Set as active term , obeležava rok da je u toku i da prijave mogu da se naprave.

Pritiskom ljubičaste olovke na izabranom roku nam omogućava da izmenimo stavke ili postavimo rok da bude aktivan.

Pritiskom tastera Update Term unosi izmene u sistem.

Term Name*
Februar 2026

Start Date*
20/01/2026

End Date*
20/02/2026

Description
February exam term

Set as Active Term

Update Term **Cancel**

Sl. 58 – Formular za izmenu postojećih rokova od strane osoblja (Staff)
Sledeći tab Term Schedule Editor istog prozora nam omogućava da dodamo predmete u izabrani rok.

Academic Calendar & Schedules

Academic Terms **Term Schedule Editor** View All Schedules

Select Term
Februar 2026 (ACTIVE)

Add Schedule Row

Name	Course	Date	Start	End	Location
Programming1	Introduction to Progr...	23/01/2026	13:30	14:50	Classroom 202
Math 1	Discrete Mathematic...	24/01/2026	12:00	14:00	Classroom 101

Save All Changes

Sl.59 - Term Schedule Editor deo prozora Academic Calendar & Schedules.
Na početku stranice se sa liste bira rok, nakon čega se pojavljuje lista trenutnih predmeta koji su već uneti u rok, možemo napraviti izmene ili ih obrisati pritiskom na taster crvene kante.

Pritiskom tastera Add Schedule Row, formira novi red koji ima prazna polja.

The screenshot shows a horizontal row of input fields. From left to right: 'New Lecture' (button), 'Course*' (text input with a red border and dropdown arrow), 'dd/mm/yyyy' (date input), '---' (time input), '---' (time input), 'Room' (text input), and a small red trash can icon.

Sl. 60 – Forumular za unos novih stavki u ispitni rok.

Nakon unosa svih polja možemo pritisnuti Save all Changes na dnu stranice, u slučaju da postoji greška sa unosom , obaveštenje će nas obavestiti.

Sledeći tab , View All Schedules, nam omogućuje da vidimo pregledniju listu već napravljenih rokova .

Academic Calendar & Schedules

The screenshot shows the 'View All Schedules' tab selected. A dropdown menu 'Select Term to View' is open, showing 'Februar 2026 (ACTIV...)'.

Schedules for Term: Februar 2026

Event Name	Courses	Date	Time	Actions
Programing1	Introduction to Programming (P1Y1C1)	23/01/2026	13:30:00 – 14:50:00 @ Classroom 202	
Math 1	Discrete Mathematics I (P1Y1C2)	24/01/2026	12:00:00 – 14:00:00 @ Classroom 101	

Sl. 61 –View All Schedules deo prozora Academic Calendar & Schedules.

- Pritiskom na taster Custom content nam se otvara prozor sa obaveštenjima namenjenim za ostalo osoblje.
U tom prozoru se mogu nalaziti poruke o obvezama ili obaveštenjima za druge korisnike sa istom ulogom.

The screenshot shows the 'Custom Content' window. It includes a header 'Custom Content' and a button '+ Add Content'. Below is a list of tasks:

- Draft the talking points for next Monday's faculty meeting. Ensure all department heads submit reports.
- Review outdated faculty pages and update office hours and contact information.
- Coordinate with library staff to complete quarterly inventory and book condition audit.
- Submit maintenance requests for projector replacements and broken desks in Building B.
- Prepare the checklist for upcoming student orientation tasks and assign responsibilities.
- Verify accreditation files for completeness before the external audit next month.
- Send reminder to all staff to complete the cybersecurity awareness training.
- Coordinate with teachers to ensure all grades are submitted by Friday 5 PM.
- Compile the list of invited companies and assign booths for the spring career fair.
- Prepare summary of current aid distribution and forecast next semester's needs.
- Notify staff about the planned LMS downtime for maintenance this weekend.

▼ Sl. 62 –Custom

Content prozor (Staff Dashboard).

Pritiskom na taster Add content nam omogućava da napravimo novu stavku na ovoj listi.

The screenshot shows a modal dialog box titled 'Custom Content'. At the top left is a 'Title' input field with the placeholder 'Title' and a red underline. Below it is a large text area with a cursor. At the bottom right are two buttons: a purple 'Save' button and a white 'Cancel' button.

Sl. 63 – Formular za kreaciju novih stavki u Custom Content prozoru.
Nakon unosa Naslova i sadržaja , pritiskom na taster save se unosi poruka u sistem. Pritiskom cancel se otklanja formular i vraća na stranicu sa slike 62.

- Pritiskom na taster Class Schedules se otvara prozor za kreiranje i izmenu rasporeda predavanja.

Manage Class Schedules

The screenshot shows a 'Create New Weekly Schedule' dialog. It includes dropdown menus for 'Study Program*' (set to Computer Science B.Sc.) and 'Academic Year*' (set to Year 1). At the bottom right is a purple 'Create Schedule' button.

Existing Schedules

Program	Year	Actions
Computer Science B.Sc.	Year 3	
Electrical Engineering B.Sc.	Year 1	
Electrical Engineering B.Sc.	Year 2	

Sl 64. - Manage Class Schedules prozor (Staff Dashboard).

Create New Weekly Schedule je forma koja nam omogućava da napravimo nov raspored nakon unosa Studijskog programa iz liste postojećih i godine studija. Sa liste Existing Schedules(Postojeći Rasporedi), možemo izabrati jednu od 3 opcije obeležene ikonicama.

Ljubičasta ikonica table sa olovkom nam omogućava izmene rasporeda i dodavanje stavki predmeta u njega.

[← Weekly Schedule Editor: Computer Science B.Sc. - Year 1](#)

Day	Course	Start Time	End Time	Location	Description	Actions
Monday	Introduction to Programming (P...)	10:00	12:00	Classroom 102	Programing 1	
Monday	Computer Architecture I (P1Y1C...)	12:30	14:30	Classroom 103	Architecture 1	
Wednesday	Calculus for Computer Science (...)	10:00	12:00	Classroom 102	CS1	
Tuesday	Discrete Mathematics I (P1Y1C2...)	10:00	12:00	Classroom 103	Math 1	

[Save All Entries](#)

Sl. 65 - Prozor za izmenu rasporeda predavanja od strane osoblja(Staff).

Pritiskom na taster Add Entry , dodaje novu stavku u raspored.

Svaka stavka je opisana Danom, koji može da se izabere iz liste radnih dana u nedelji, Predmeta koji se nalazi u studijskom programu izabranom u kreaciji rasporeda. Vremenom početka i kraja , lokaciji, i opisu.

Stavke se mogu ukloniti pritiskom na taster crvene kante.

Pritiskom na taster Save all Entries, će unos biti sačuvan u sistem.

Sa slike 64. Pritiskom na žuto oko nam omogućava da vidimo raspored u preglednjem obliku.

← Full Weekly Schedule: Computer Science B.Sc. - Year 1

Time	Monday	Tuesday	Wednesday	Thursday	Friday
10:00 – 12:00	Introduction to Programming (P1Y1C1) 10:00 – 12:00 @ Classroom 102	Discrete Mathematics I (P1Y1C2) 10:00 – 12:00 @ Classroom 103	Calculus for Computer Science (P1Y1C4) 10:00 – 12:00 @ Classroom 102	–	–
12:00 – 12:30	–	–	–	–	–
12:30 – 14:30	Computer Architecture I (P1Y1C3) 12:30 – 14:30 @ Classroom 103	–	–	–	–

Sl.65- Prikaz formiranog rasporeda.

Sa slike 64. Pritiskom na crvenu kantu nam omogućava da uklonimo raspored iz sistema nakon potvrde.

- Pritiskom na taster Manage User Roles , otvara prozor korisniku u kojem ima mogućnosti izmene uloga.

Manage User Roles

Search users		
202501		
Name	Current Role	Change Role
Alex Johnson	stud_alex1 • alex1@student.com	Index: 202501 STUDENT ↗
Emma Anderson	stud_emma10 • emma10@student.com	Index: 2025010 STUDENT ↗
Jack Thomas	stud_jack11 • jack11@student.com	Index: 2025011 STUDENT ↗
Sophia Hernandez	stud_sophia12 • sophia12@student.com	Index: 2025012 STUDENT ↗
William Moore	stud_will13 • will13@student.com	Index: 2025013 STUDENT ↗
Chloe Taylor	stud_chloe14 • chloe14@student.com	Index: 2025014 STUDENT ↗
Jacob Lee	stud_jacob15 • jacob15@student.com	Index: 2025015 STUDENT ↗
Hannah Perez	stud_hannah16 • hannah16@student.com	Index: 2025016 STUDENT ↗

Sl. 66 – Manage User Roles prozor (Staff Dashboard).

Na početku stranice se nalazi pretraga korisnika po imenu , broju indeksa ili email-u.

Nakon izbora korisnika , pritiskom na žute strelice se otvara novi prozor koji nas pita u koju ulogu želimo da promenimo korisnika.

Nakon izbora uloge pritiskom na Confirm dugme se primenjuje promena u sistemu.

Change Role for William Moore

New Role
Teacher

Confirm

Cancel

Sl. 67 – Prozor za izbor uloge

izabranog korisnika od strane osoblja (Staff).

3. Student:

The screenshot shows the Student Portal dashboard with a purple header bar. The header displays "Student Portal" and "Welcome back, Mia Williams". Below the header are several cards:

- Personal Information:** Index: 2025002. Includes Email: mia2@student.com and Username: stud_mia2. A blue edit icon is present.
- Study Program:** Computer Science B.Sc. Shows enrollment status: You are enrolled in this program. A yellow info icon is present.
- Current Courses:** 11 active course(s). Includes a link to view syllabuses and course details and a purple arrow icon.
- Apply for Exam:** Active Term: Februar 2026. Includes a red checkmark icon and a red person icon.
- Study History:** 7 completed course(s). Shows 36 ECTS earned and a progress bar at 15.0% toward degree. Includes a purple edit icon.
- Enroll in New Courses:** 0 course(s) available. Includes a yellow info icon.
- Class Schedule:** Computer Science B.Sc. • Year 1. Shows 1 class and a link to view weekly timetable. Includes a purple info icon.

Sl. 68 – stranica Student Dashboard.

Student poseduje sledeće sposobnosti:

1. Lične informacije (Personal Information)
2. Studijski program (Study Program)
3. Predmeti (Current Courses)
4. Prijava Ispita (Apply for Exam)
5. Istorija Studiranja (Study History)
6. Prijava na nove predmete (Enroll in New Courses)

7. Raspored Predavanja (Class Schedule)

- Pritiskom na taster Personal Information , otvara korisniku nov prozor sa informacijma o svom profilu i mogućnost izmene informacija.
Nakon izmene korisnik može da pritisne Save Changes da ih primeni na sistem.

Edit Profile

Email* mia2@student.com	First Name* Mia	Last Name* Williams
Save Changes Cancel		

Sl. 69 – Prozor za izmenu profila studenta(Student Dashboard).

- Pritiskom na taster Study Program , otvara korisniku nov prozor sa informacijama o upisu i trenutnom programu studija.

Study Program

Computer Science B.Sc.

Program ID: 1

Current Academic Year: 1

Enrolled in Year: 1

Enrollment Date: Jan 23, 2026

Undergraduate program focused on programming, algorithms, and software engineering.

[Close](#)

Sl. 70 – Prozor Study Program (Student Dashboard).

- Pritiskom na taster Current Courses nam otvara nov prozor u kojem student može da vidi listu svojih predmeta .

Current Courses (11)

Course	Code	ECTS	Tasks
Introduction to Programming	P1Y1C1	6	 View Tasks
Discrete Mathematics I	P1Y1C2	6	 View Tasks
Computer Architecture I	P1Y1C3	6	 View Tasks
Calculus for Computer Science	P1Y1C4	6	 View Tasks
Programming Lab I	P1Y1C5	6	 View Tasks
Introduction to Programming	P1Y1C1	6	 View Tasks
Discrete Mathematics I	P1Y1C2	6	 View Tasks
Computer Architecture I	P1Y1C3	6	 View Tasks
Calculus for Computer Science	P1Y1C4	6	 View Tasks
Programming Lab I	P1Y1C5	6	 View Tasks

[Close](#)

Tasks & Requirements – Introduction to Programming

First Python Program: Personal Introduction

Write a program that asks the user for their name, age, and favorite hobby, then prints a short welcome message containing all three pieces of information in a nice sentence.

[Close](#)

Sl. 72 – Prikaz

zadataka za studente izabranog predmeta.

- Pritiskom na taster Apply for Exam, otvorće se prozor preko kojeg korisnik može da se prijavi na ispit.

Apply for Exam

Course	ECTS	Available Sessions
Introduction to Programming(P1Y1C1)	6	1 session(s) → Apply
Discrete Mathematics I(P1Y1C2)	6	1 session(s) → Apply

Sl. 73 – Apply for Exam prozor (Student Dashboard).

U listi predmeta se pojavljuju samo predmeti koje pohadja student i koji su trenutno u rasporedu ispitnih rokova. Pritiskom tastera Apply , korisnik će biti preusmeren na prozor izbora roka.

Choose Exam Session – Introduction to Programming

Select one of the available exam sessions below:

Term	Date & Time	Location	Action
Februar 2026	2026-01-26 13:30:00	Classroom 202	Apply

Sl 74. - Izbor rokova za prijavu ispita

Sledećim pritiskom Apply tastera se podnosi prijava ispita i unosi se u sistem. U slučaju da student ima ispit položen ili prijavljen u istom roku, taster će biti siv i neće moći da se pritisne.

- Pritiskom tastera Study History korisniku se otvara prozor preko kojeg može da pregleda istoriju studiranja i broj položenih bodova.

 Study History



Passed Exams (4)			Taken Exams (5)			Pending Applications (2)		
Course	ECTS	Grade	Course	ECTS	Grade	Course	ECTS	Grade
Systems Analysis & Design	6	9						
Introduction to Programming	6	8.5						
Discrete Mathematics I	6	7.5						
Introduction to Cybersecurity	6	6						

Sl. 75 – Prozor Study History , Passed Exams deo (Student Dashboard).

Ovaj prozor se sastoji od tri dela(tab-a) gde prvi ,kao naveden na slici 75, prikazuje položene ispite, sa ocenama i bodovima koje ispit nosi.

Drugi deo, “Taken Exams” , predstavlja ispite na koje je student izasao.

Passed Exams (4)		Taken Exams (5)			Pending Applications (2)	
Course	ECTS	Term	Grade	Status	Course	ECTS
Systems Analysis & Design	6	Summer A 2025	9	Passed		
Introduction to Programming	6	Winter 2025	8.5	Passed		
Discrete Mathematics I	6	Winter 2025	7.5	Passed		
Introduction to Cybersecurity	6	testcurrent (ID: 11)	6	Passed		
Introductory Security Lab	6	test2 (ID: 12)	5	Failed		

Sl.76 – Prozor Study History , Taken Exams deo (Student Dashboard).

I treći na kojem student može da pregleda prijave koje je napravio i nisu još ocenjene.

Passed Exams (4)		Taken Exams (5)		Pending Applications (2)	
Course	ECTS	Term	Status		
Introductory Security Lab	6	test2 (ID: 12)	Pending Review		
Data Structures	6	Summer B 2025	Pending Review		

Sl. 77 – Prozor Study History , Pending Applications deo (Student Dashboard).

- Pritiskom na taster Enroll in Available Courses , korisniku se otvara prozor u kojem pože da se prijavi da pohadja predmete na godinama na kojima je upisan.

+ Enroll in Available Courses

You are in Year 1 of Computer Science B.Sc.

Select courses to enroll:

<input type="checkbox"/>	Course	Year	ECTS
<input type="checkbox"/>	Introduction to Programming (P1Y1C1)	Year 1	6
<input type="checkbox"/>	Discrete Mathematics I (P1Y1C2)	Year 1	6
<input type="checkbox"/>	Computer Architecture I (P1Y1C3)	Year 1	6
<input type="checkbox"/>	Calculus for Computer Science (P1Y1C4)	Year 1	6
<input type="checkbox"/>	Programming Lab I (P1Y1C5)	Year 1	6
<input type="checkbox"/>	Academic Skills for Computing (P1Y1C6)	Year 1	6

[Enroll Selected \(0\)](#) [Close](#)

Sl. 78 – Prozor Enroll in Available Courses (Student Dashboard).

Student obeležava predmete koje želi da phoadja sa otkačajima u kućicama zatim nakon svog izbora , može da pritisne Enroll Selected gde će prijaviti predmete u sistem i imaće pristup njima u Current Courses, kao sto je prikazano pethodnim segmentima(Sl. 71).

- Pritiskom na taster Class Schedule , korisniku se otvara prozor u kojem ima pregled svih predmeta akademske godine i studijskog programa na kojoj je upisan.

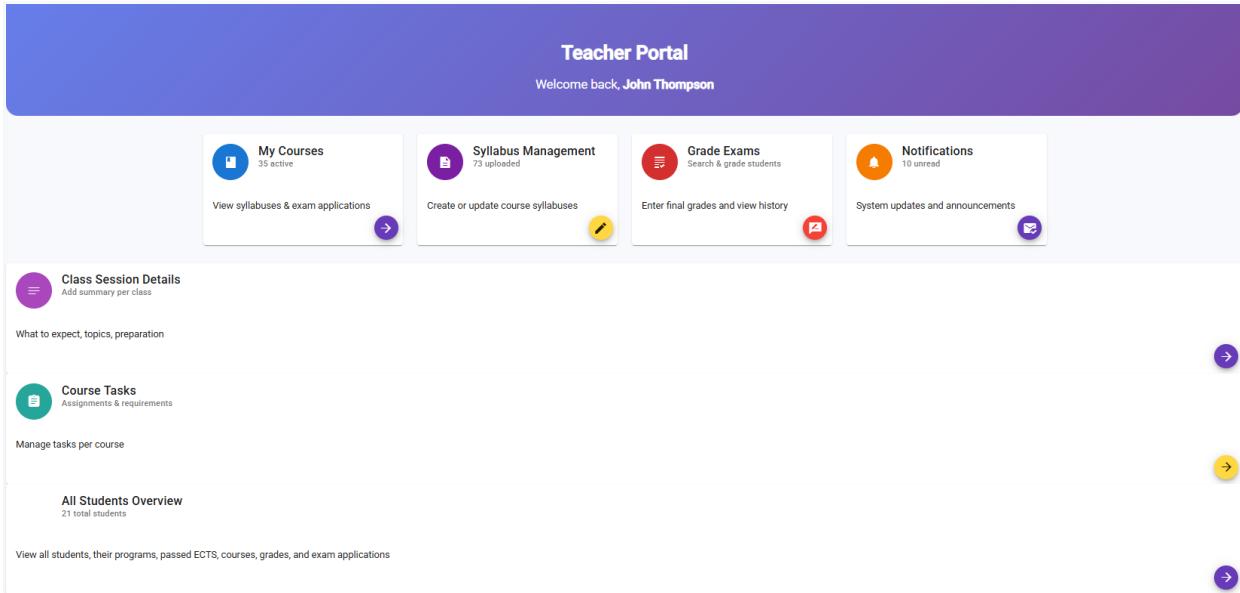
My Weekly Schedule

Day & Time	Course
Monday 10:00 – 12:00 @ Classroom 102	Introduction to Programming (P1Y1C1)
Monday 12:30 – 14:30 @ Classroom 103	Computer Architecture I (P1Y1C3)
Wednesday 10:00 – 12:00 @ Classroom 102	Calculus for Computer Science (P1Y1C4)
Tuesday 10:00 – 12:00 @ Classroom 103	Discrete Mathematics I (P1Y1C2)

[Close](#)

Sl.79 - Prikaz rapsoreda predavanja za studente.

4. Nastavnik (Teacher):



The Teacher Portal dashboard features a purple header with the title "Teacher Portal" and a welcome message "Welcome back, John Thompson". Below the header are four main navigation cards:

- My Courses**: 35 active. View syllabuses & exam applications. (Icon: blue square with white document)
- Syllabus Management**: 73 uploaded. Create or update course syllabuses. (Icon: purple folder)
- Grade Exams**: Search & grade students. Enter final grades and view history. (Icon: red grid with calculator)
- Notifications**: 10 unread. System updates and announcements. (Icon: orange bell)

Below these cards are three additional sections:

- Class Session Details**: Add summary per class. What to expect, topics, preparation. (Icon: purple circle with equals sign)
- Course Tasks**: Assignments & requirements. Manage tasks per course. (Icon: green clipboard)
- All Students Overview**: 21 total students. View all students, their programs, passed ECTS, courses, grades, and exam applications. (Icon: blue person icon)

Sl. 80 – Stranica Teacher Dashboard.

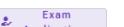
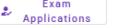
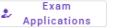
Nastavnik poseduje sledeće sposobnosti:

1. Moji Predmeti(My Courses)
2. Upravljanje Silabusima(Syllabus Management)
3. Ocenjivanje Ispita(Grade Exams)
4. Obaveštenja(Notification)

5. Detalji Predavanja(Class Session Details)
6. Zadaci Predmeta(Course Tasks)
7. Pregled Studenata(All Students Overview)

- Pritiskom na taster My Courses , korisniku se otvara prozor gde može da pregleda predmete koje korisnik održava.

 My Courses (35)

Course Name	Code	Study Program	ECTS	Teacher	Actions
Introduction to Programming					
Course 1 for year 1 of Computer Science B.Sc.	P1Y1C1	Computer Science B.Sc.	6	John Thompson(You)	 Exam Applications
Discrete Mathematics I					
Course 2 for year 1 of Computer Science B.Sc.	P1Y1C2	Computer Science B.Sc.	6	John Thompson(You)	 Exam Applications
Computer Architecture I					
Course 3 for year 1 of Computer Science B.Sc.	P1Y1C3	Computer Science B.Sc.	6	John Thompson(You)	 Exam Applications
Calculus for Computer Science					
Course 4 for year 1 of Computer Science B.Sc.	P1Y1C4	Computer Science B.Sc.	6	John Thompson(You)	 Exam Applications
Programming Lab I					
Course 5 for year 1 of Computer Science B.Sc.	P1Y1C5	Computer Science B.Sc.	6	John Thompson(You)	 Exam Applications

Sl.81 - My Courses prozor (Teacher Dashboard).

Na listi su opisani kod predmeta, studijski program , broj ECTS bodova koji nose, nastavnik koji ga održava i akcija prijave ispita “Exam Applications”.

Pritiskom na taster Exam Application izabranog predmeta , će nam prikazati istoriju i aktivne prijave tog predmeta.

 My Courses (35)

←

Exam Applications: Introduction to Programming

Student	Term	Status
Alex Johnson202501	Winter 2025	Graded: 8.5(Attempts 1)
Noah Rodriguez2025007	Winter 2025	Graded: 8.5(Attempts 1)
Mia Williams2025002	Februar 2026 (ID: 16)	Awaiting Grade

Close

Sl. 82 – Prijave ispita izabranog predmeta sa My Courses Prozora (Teacher Dashboard).

- Pritiskom na taster Syllabus Management se otvara prozor gde korisnik može da pregleda i izmeni silabuse predmeta.

Syllabus Management

Your Courses (35)

Course	Program	Syllabus Status	Actions
Introduction to Programming (P1Y1C1)	Computer Science B.Sc.	 Uploaded	 Manage Syllabus
Discrete Mathematics I (P1Y1C2)	Computer Science B.Sc.	 Not uploaded	 Manage Syllabus
Computer Architecture I (P1Y1C3)	Computer Science B.Sc.	 Not uploaded	 Manage Syllabus
Calculus for Computer Science (P1Y1C4)	Computer Science B.Sc.	 Uploaded	 Manage Syllabus
Programming Lab I (P1Y1C5)	Computer Science B.Sc.	 Not uploaded	 Manage Syllabus
Academic Skills for Computing (P1Y1C6)	Computer Science B.Sc.	 Uploaded	 Manage Syllabus

Sl. 83 – Syllabus Management prozor (Teacher Dashboard).

Prikazani su samo predmeti koje korisnik održava i takođe je prikazan status silabusa. Pritiskom na taster izabranog silabusa Manage Syllabus, se preusmerava ka novom prozoru gde korisnik može da obriše ili izmeni silabus.

Syllabus Management

←

Syllabus: Introduction to Programming (P1Y1C1)

Current Syllabus

Academic Year: 1

Uploaded PDF:

 [Open Syllabus PDF](#)

 [Replace Syllabus](#)

 [Delete Syllabus](#)

Sl. 84 – Prozor izmene silabusa (Teacher Dashboard)

Pritiskom tastera open Syllabus PDF se preusmerava na link koji je okačen u samom opisu silabusa.

Pritiskom na taster Replace Syllabus se otvara formular u kome se mogu napraviti izmene.

Replace Syllabus

Course: Introduction to Programming (P1Y1C1)

PDF URL (direct link)* google.docs/P1Y1C1/1
Enter a publicly accessible PDF link
Academic Year (optional) 1
Update Cancel

Sl. 85 – Formular za izmenu silabusa od

strane nastavnika.

Nakon izmena pritiskom na taster update se izmene unose u sistem.

- Pritiskom na taster Grade Exams, korisniku se otvara prozor u kojem može da ocenjuje ispite

The screenshot shows a table of student applications. Each row contains a student's name, index number, pending grade (orange circle), graded grade (green circle), and a 'View & Grade' button. The table has columns for Student, Pending, and Graded. A search bar at the top left allows searching by name or index number, with a placeholder 'e.g. John or 12345'. A search icon and a '8 of 8 students' count are also present.

Student	Pending	Graded	
Emma Anderson Index: 2025010	0	1	View & Grade
Kate Lewis Index: 2025020	1	0	View & Grade
Jack Thomas Index: 2025011	1	0	View & Grade
Marko Petrović Index: null	1	0	View & Grade
Alex Johnson Index: 202501	1	7	View & Grade
Jovan Pavlović Index: NULL	0	1	View & Grade

Sl. 86 – Grade Exam prozor (Teacher Dashboard).

Korisnik može da pretraži studente po broju indeksa ili imenu , zatim može da pritisne taster View & Grade izabranog studenta da bi otvorio prozor za ocenjivanje i pregledanje istorije polaganja kod njegovih predmeta.

← Mia Williams (2025002)

Pending Grading

Course	Term	Exam Date	Actions
Introduction to Programming (P1Y1C1)	Februar 2026 (ID: 16)	Jan 26, 2026	Grade Exam

Graded Exams

Course	Term	Grade	
Discrete Mathematics I	Februar 2026 (ID: 16)	6 (Attempt 1)	Delete Grade

Sl. 87 – Prikaz prijava i ocena izabranog studenta sa Grade Exam prozora (Teacher Dashboard).

U novom delu prozora se prikazuju prijavljeni i ocenjeni ispiti.

U Pending Grading segmentu se prikazuju prijave koje je izabrani student napravio.

Pritiskom na taster Grade Exams se otvara formular u kojem korisnik može da oceni ispit .

Assign Grade

Course: Introduction to Programming

Term: Februar 2026 (ID: 16)

Student: Mia Williams (2025002)

Grade (5-10)*

Submit Grade Cancel

Sl. 88 – Formular za ocenjivanje ispita od strane nastavnika.

Nakon izabrane ocene Submit grade prestaje da bude siv i može da se pritisne.

Pritiskom tastera Submit se ocena unosi u sistem i može da se pregleda u daljem segmentu, kao i kod studenta na njegovom profilu.

U segmentu Graded Exams, ocenjeni ispiti koje je taj student polagao.

Gde možemo obrisati ocenu pritiskom tastera crvene kante.

- Pritiskom tastera Notifications , korisniku se otvara prozor u kojem može videti obaveštenja koja su okačena od strane osoblja.

 Notifications (10)

Date	Title	Message
Nov 20, 2025 11:40 AM	New Enrollments	Course enrollment changes: you have students added to your course roster.
Nov 21, 2025 4:05 PM	Midterm Grades Deadline	Reminder: Submit midterm grades by end of week through the faculty portal.
Nov 19, 2025 9:10 AM	Guest Lecture Confirmation	There is a guest lecture scheduled for your course – please confirm logistics with admin.
Nov 22, 2025 10:50 AM	Assessment Workshop	Workshop: Effective assessment design for online courses – seats limited.
Nov 18, 2025 6:00 PM	Syllabus Update Request	Request from department: update your course syllabus before the next term.
Nov 23, 2025 12:25 PM	Gradebook Update	IT support notice: gradebook reporting tool updated – try the demo and report issues.
Nov 24, 2025 3:40 PM	Approve Project Proposals	Reminder to approve student project proposals submitted this week.
Nov 17, 2025 5:05 PM	Instructional Design Support	Instructional designers are available to help redesign course materials for blended learning.
Nov 25, 2025 10:15 AM	Safety Drill Notice	Safety drill scheduled in your building – please inform students of procedures.
Nov 16, 2025 12:11 PM	Faculty Meeting	Reminder: faculty meeting on Friday to discuss curriculum changes.

[Close](#)

Sl. 89 – Notifications prozor (Teacher Dashboard).

- Pritiskom tastera Class Session Details, korisniku se otvara prozor u kojem može pregledati rasporede predavanja i dodati opise koji se mogu pregledati.

 Class Session Details

Your Weekly Schedules

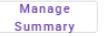
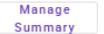
Select a schedule to manage class summaries

Program	Year	
Electrical Engineering B.Sc.	Year 1	
Computer Science B.Sc.	Year 1	

Sl. 90 - Class Session Details prozor (Teacher Dashboard).

Na listi su prikazani rasporedi predavanja , predstavljeni po studijskim programima i godinama pritiskom na taster Manage Summaries se otvara novi prozor gde korisnik može pregledati sve predmete.

Classes: Electrical Engineering B.Sc. - Year 1

Day & Time	Course	
Monday 03:03 – 03:34 ^①	Circuit Theory I (P3Y1C1)	
Monday 01:01 – 02:02 ^②	Engineering Mathematics I (P3Y1C2)	

Sl. 91 – Prikaz stavki izabranog rasporeda sa Class Session Details prozora (Teacher Dashboard).

A zatim daljim pritiskom na Manage Summary može dodati opis predavanju.

≡ Class Session Details

←

Summary: Circuit Theory I

Monday • 03:03 – 03:34 @ 1

Introduction

First Class

+ Add Another Summary

Add Summary

Title*

Description (optional)

Save Cancel

Sl . 92 – Formular za dodavanje opisa predavanju od strane nastavnika.

Pritiskom tastera crvene kante korisnik može obrisati opis.

Pritiskom olovke korisnik može izmeniti opis.

Pritiskom Add Another Summary može napraviti dodatni opis, gde se otvara formular prikazan na slici 92. Pritiskom tastera Save se primenjuje promena u sistemu.

- Pritiskom tastera Course Task , korisniku se otvara lista predmeta koja održava gde može dodati zadatke koji će se proslediti studentima.

Course Tasks & Requirements

Select a Course to Manage Tasks

Course	
Introduction to Programming(P1Y1C1)	Manage Tasks
Discrete Mathematics I(P1Y1C2)	Manage Tasks
Computer Architecture I(P1Y1C3)	Manage Tasks
Calculus for Computer Science(P1Y1C4)	Manage Tasks
Programming Lab I(P1Y1C5)	Manage Tasks
Academic Skills for Computing(P1Y1C6)	Manage Tasks
Introduction to Information Systems(P2Y1C1)	Manage Tasks
Principles of Management(P2Y1C3)	Manage Tasks

Sl. 93 – Course Tasks & Requirements prozor (Teacher Dashboard).
Daljim pritiskom tastera Manage Tasks se korisniku se otvara lista zadataka izabranog predmeta gde korisnik može da napravi novi zadatak, izmeni postojeći ili obriše postojeći zadatak.

Course Tasks & Requirements



Tasks: Introduction to Programming (P1Y1C1)

+ Add Task

First Python Program: Personal Introduction

Write a program that asks the user for their name, age, and favorite hobby, then prints a short welcome message containing all three pieces of information in a nice sentence.



Sl. 94 – Spiak zadataka izabranog predmeta sa Course Tasks & Requirements prozora (Teacher Dashboard).

Pritiskom na taster Add Task se otvara formular u kojem se mogu uneti informacije , a pritiskom na Save taster se unose u sistem.

Add Task

Task Name*

Description (optional)

Sl. 95 – Formular za dodavanje novih zadataka za predmete od strane nastavnika.

Pritiskom olovčice sa slike 94. Korisnik može da izmeni postojeći zadatak . Nakon izmene pritiskom na Update se izmene unose u sistem.

Edit Task

Task Name*
First Python Program: Personal Introduction

Description (optional)
Write a program that asks the user for their name, age, and favorite hobby, then prints a short welcome message containing all three pieces of information in a nice sentence.

Update

Cancel

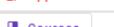
Sl. 96 Formular za izmenu postojećih zadataka za predmete od strane nastavnika.

Pritiskom crvene kante sa slike 94 korinik može da obriše postojeći zadatak nakon potvrde.

- Pritiskom tastera All Students overview korisnik može da pregleda sve studente u sistemu.

All Students (21)

Search students
Name, index number, en 

Student	Program	Passed ECTS	
Alex Johnson Index: 202501	Cybersecurity B.Sc.	24	 Courses  Grades  Applications
Mia Williams Index: 2025002	Computer Science B.Sc.	6	 Courses  Grades  Applications
Luke Brown Index: 2025003	Cybersecurity B.Sc.	0	 Courses  Grades  Applications
Ryan Davis Index: 2025005	Electrical Engineering B.Sc.	0	 Courses  Grades  Applications

Sl. 97 – All Students prozor (Teacher Dashboard).

Korisnik može da pretraži studente preko imena ili broja indeksa “Search Bar”-om koji se nalazi na gornjem delu stranice.

Korisnik ima tri opcije za svakog studenta:

Da pregleda predmete koje student pohadja,

 Enrolled Courses - Alex Johnson

Computer Systems Basics (P5Y1C3) – 6 ECTS

Introduction to Cybersecurity (P5Y1C1) – 6 ECTS

Network Fundamentals (P5Y1C2) – 6 ECTS

Programming for Security (P5Y1C4) – 6 ECTS

Introductory Security Lab (P5Y1C6) – 6 ECTS

Digital Literacy & Ethics (P5Y1C5) – 6 ECTS

Circuit Theory I (P3Y1C1) – 6 ECTS

Engineering Mathematics I (P3Y1C2) – 6 ECTS

Introduction to Electrical Engineering (P3Y1C4) – 6 ECTS

Physics for Engineers (P3Y1C3) – 6 ECTS

Practical Electronics Lab I (P3Y1C5) – 6 ECTS

Electronics I (P3Y2C3) – 6 ECTS

Technical Computing (P3Y1C6) – 6 ECTS

Signals & Systems (P3Y2C1) – 6 ECTS

Digital Systems Design (P3Y2C4) – 6 ECTS

 Sl. 98 – Lista predmeta koje pohadja izabrani student.

Da pregleda istoriju polaganja koje student pohadja.

 Exam Grades - Alex Johnson

Introduction to Cybersecurity – Grade: 6 (PASSED)

Introduction to Programming – Grade: 8.5 (PASSED)

Systems Analysis & Design – Grade: 9 (PASSED)

Discrete Mathematics I – Grade: 7.5 (PASSED)

 Sl. 99 – Lista položenih ispita i njihovih

ocena izabranog studenta.

Da pregleda prijave koje je student napravio.

 Exam Applications - Alex Johnson

Introduction to Cybersecurity (P5Y1C1) – Term: testcurrent (ID: 11)

Introductory Security Lab (P5Y1C6) – Term: test2 (ID: 12)

Introductory Security Lab (P5Y1C6) – Term: test2 (ID: 12)

Introduction to Programming (P1Y1C1) – Term: Winter 2025

Systems Analysis & Design (P2Y2C1) – Term: Summer A 2025

Discrete Mathematics I (P1Y1C2) – Term: Winter 2025

Data Structures (P1Y2C1) – Term: Summer B 2025

 Sl. 100 – Lista prijavljenih ispita izabranog

studenta.

