University Database of Faculties Research Publications and Projects

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Project Description -

I. Start page (index.php)

- User lands on Login Page
- After login goes to landing page (landingpage.php) Use test7@iitp.ac.in and testpass7 (various data has been entered for this user)
- No Account? Goes to Signup page
- Signup using University Provided Faculty Id and Webmail so that no random person can register and see the data
- FacultyId and Webmail and other details of Faculties are in Faculties table managed by any
 official responsible for managing databases

II. Signup (signup.php)

- User fills the signup form and then validification starts
 - ➤ Client side Html form validification checks if any field is left blank and then shows tooltip to fill the entry
 - > Server side php form validification (Validification.php) -
 - Step by Step validification
 - First checks for password validification
 - password must match repeat password
 - password must have 1 lowercase 1 uppercase 1 number 1 special character must be min 7 characters long and max 20 characters long(login table in db has password field of 20 char)
 - Second checks for username being unique (two users cant have same username in login table)
 - Third checks for valid FacultyId and Webmail
 - If validification fails at any step then proper alert is given to the user
- <u>Security</u> Token is generated each time user lands on signup page so that each time user fills the form it checks the form's token so that it can be submitted only once, user cant request to submit same form again and again and provides **csrf(cross site request forgery) protection** (token.php)

III. Managing user Sessions

- Each time a page is opened **Session** is created using init class (init.php) and stores it using session class (session.php) . Session stores session name and Webmail through which user logged in
- When user login **User** class is called (user.php) and it stores the session's name and webmail if credentials provided is correct in Session class
- User cant access landing page without logging in (try to change url to localhost:8001/landingpage.php) neither the login page (index.php) while logged in

IV. Landing page and features

- ➤ Use <u>test7@iitp.ac.in</u> and testpass7 (various data has been entered for this user) to login
- Navbar Check logged in user's Journals, Conferences, Projects through navigation bar at the top
- Navbar shows username(takes help of Session) -click on it to go to profile page
- > Adding Projects, Conferences, Journals
 - User fills the data in modal that pops up
 - **Form validifications** client sided html form validification & then server side php validification

- Invalid Faculty id / webmail would result in failed form validification with proper alert dialog
- No Faculty can add enteries for other faculties (server checks which user has logged in and matches it with faculty id and webmail provided during form input)
- enteries in form are like giving date > current date, author rank not being number etc are checked and proper alert is given if validification fails
- enteries in form are also checked for stringlength if it is more than specified than user would be alerted
- Handling Multiple authors for same publication/ project (added after project demo)
 - alert is given that faculty has been added as author/contributor of that publication/ project provided user has given correct publication/ project (checks using regexp)
 - else new publication/ project entry is made

Main Container -

Displays

- latest 5 projects added (limit can be increased in landingpage.php)
- See latest 5 conferences added
- See latest 5 projects added

Search

- Journals/Conferences
 - By Faculty Name, Publisher Name, Published in last n years, By field of publication, By Journal title
 - Journals/Conferences that have more than one author will also be displayed along with Author rank but in adjacent rows (check using title = testingphp107 only 1 journal has been added having multiple authors)
- Projects
 - 1. By Faculty name, Budget $\geq x$, Sponsor's name, Project name

Sidebar -

- Top 3 faculties having most journals published till now
- Top 3 faculties having most conferences publications till now
- Top 3 faculties having most projects (ongoing + completed)
- Fundings received by all the depts. (dept. Showing 0 funding data has not been added in db, add data to see the change)
- Most active department in terms of total publications published
- My Journals, My conferences, My Projects takes you to their respective pages

V. Profile page

- > Update Password, Username by clicking the username in the navigation bar
 - Validification client side html, server side php verification (similar procedure as during signup form validification)

VI. Projects/ Journals/ Conferences page

Displays

- Logged in faculties Projects/ Journals / Conferences
 - **History Bargraph** (uses chartis, data through db, sql queries)
 - shows current logged in faculties' publications/ projects over the past years (limit 20)
 - shows current logged in faculties' departement's publication/projects over the past years

> Search

- logged in faculties Projects/ Journals/ Conferences
 - By publication title/ publisher name/ in last x years/ budget>=x/ project name/ project sponsor/ field of publication
 - Here search result will not show contributing faculty/ author of project/ publications (limitation due to way results are generated using sql) instead search for it in landing page and proper results will be shown

- > Search past trends (added after project demo)
 - **History Bargraph** (uses canvasjs)
 - Search History of publication/projects (limit 20) any faculty by name (if logged in through testuser7@iitp.ac.in use faculty name testuser6 to verify with the trends of logged in user's graph)
 - Search History of publication/projects (limit 20) any department

User Interface -

- 1. Site created from scratch using html, css, bootstrap
- **2.** Uses ¡Query to achieve more functionalities
- 3. No fancy stuff advanced Css/Animations/Javascript used, focus on backend
- **4.** Charts made using chartJS, canvasJS (dynamic in nature)
- **5.** Site created keeping mobile first in mind (all charts/ tables/ etc are responsive)

Possible Future Work -

- 1. Creating page for visitors
- **2.** CSRF protection throughout the website and other security features
- **3.** Password hashing (as of now it is stored as plain text)
- **4.** Extending the project to include Students Database
- **5.** Extending already faculty database