Examination Portal

Submodules : marks entering and uploading, show result

(Project submodule Report)

From 2020PGCACA92 and 2020PGCACA21

These submodules are related to entering and uploading marks in the database by the only admin and result showing process .Admin can also see the result. And Student can also see their result by providing their registration number and semester.

Front End : HTML , CSS , JS

Viewing Engine : EJS

 Back End : Node JS

Framework : Bootstrap, Express, Mongoose (for ODM)

Database : Mongodb

Marks Schema :

The marks schema contains all semester marks distribution and we have made registration number and semester as index of marks database to access given student through registration number and their semester.

Upload Marks


```
router.post('/result_process',checkLogin ,(req, res) => {

    var chk = marksModel.firstMarksModel.find({ sem: req.body.sem, regd:
req.body.regd });
    chk.exec(async function (err1, res1) {
        if (err1) throw err1;

        if (res1 == '') {

            ...

            ...

        }
    }
  })
});
```

In this upload marks submodule we are checking first that marks of given student of particular semester is already present or not. If marks not entered then the marks provided by the user is saved in database according to semester and registration number of student provided.

After successfull insertion of marks a message is passed to view which confirm successfull insertion in database.

Validation of marks :

For validating marks for each section (mid, assignment, classs test, end sem) ,we have create function named validate_range using javascript and also define minimum and maximum value in the input box tag in html code. By default marks of every section is defined zero.

```javascript
<script type="text/javascript">
    function validate_range() {
        var usern = document.getElementsByClassName("range1");
        var usern1 = document.getElementsByClassName("range2");
        var user3 = document.getElementsByClassName("range3");
        var user4 = document.getElementsByClassName("range4");
        for (var i = 0; i < usern.length; i++) {
            if (usern[i].value < 0 || usern[i].value > 30) {
                alert("Enter valid marks.");
                usern[i].focus();
                return false;
            }
        }
        for (var i = 0; i < usern1.length; i++) {
        if (usern1[i].value < 0 || usern1[i].value > 10) {
                alert("Enter valid marks.");
                usern1[i].focus();
                return false;
            }
        }
        for (var i = 0; i < user3.length; i++) {
        if (user3[i].value < 0 || user3[i].value > 10) {
                alert("Enter valid marks.");
                user3[i].focus();
                return false;
            }
        }
    }
```

Show Result :

Registration No.: 2020PGCACA21

Sr. no	Subject code	Subject name	Assignment	Test	Mid sem	End sem	Total Marks	Credits
1	CA3101	Computer Programming and Problem Solving Using C	10	10	23	44	87	
2	CA3102	Computer Organization and Architecture	10	8	26	40	84	
3	CA3103	Resource Management Techniques	8	9	29	48	94	
	CA3104	Computer Programming in C LAB	7	8	22	44	81	
5	CA3105	Statistical and Optimization Techniques LAB	9	10	29	47	95	
6	MA3101	Mathematical Foundation of Computer Application	9	10	22	46	87	
7	MA3102	Probability and Statistical Computing	10	10	25	40	85	
					result	total :	613	

```javascript
router.post('/result', checkLogin, function(req, res){
  var result = marks.find({sem:req.body.slct2, regd:req.body.regd});
  console.log(req.body.slct2);
  console.log(req.body.regd);
  result.exec(function(err,data){
    if(err) throw err;
    console.log(data);
    res.render('result', { title: 'Student record', records:data});

  })
});
```

This function gets the registration number and semester provided by user and accordingly find their marks from database and send their data to **result view** where marks is show properly in the form of result.