
Mini Project Report

On

FULL STACK DEVELOPMENT

Submitted by

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(R170648)

Under the guidance of

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In fulfilment for the award of the degree of

Bachelor of Technology

In

Computer Science Engineering



Rajiv Gandhi University of Knowledge Technologies

(Catering the Educational Needs of Gifted Rural Youth of A.P)

R.K Valley , Y.S.R Kadapa(Dist)-516330

ACKNOWLEDGEMENT

Words are only representation of my sincere gratitude that we have towards actions and their inherent associations. As a matter of fact, without cooperation, no thought could be coined into real action. Consistent motivation, invaluable support throughout any project is an issue that cannot be quantitatively measured. The acknowledgement is only a fraction of regards towards their gestures.

I extend my sincere and heartfelt thanks to our esteemed **guide, Mr PENUGONDA RAVI KUMAR** and for his exemplary guidance, monitoring and constant encouragement throughout the course at crucial junctures and for showing us the right way.

I would like to extend thanks to our respected **Head of IT Infra, Mr. Satyanandaram K and Software Engineer, Mr. Lingamurthy B** for allowing us to use the facilities available. I would like to thank other faculty members also

Last but not the least, I would like to thank my friends and family for the support and encouragement they have given us during the course of our work.

SETTI HEMANTH BABU

Rajiv Gandhi University of Knowledge Technologies

(Catering The Educational Needs of the Gifted Rural Youth of A.P)

IIIT, R.K Valley, YSR Kadapa (Dist)- 516330.



CERTIFICATE

Certified that the mini project report on, "**Responsive and Dynamic Website Building**" in the domain **FULL STACK DEVELOPMENT** is bonafide work of **SETTI HEMANTH BABU, R170648** 3rd Year B.Tech, Computer Science Engineering in R.K Valley Campus of Rajiv Gandhi University of Knowledge Technologies (RGUKT), Andhra Pradesh carried out during 20 April 2022 to 20 August 2022.

Faculty In-charge

Head of the Department

Panel Members:

- 1.
- 2.
- 3.

ABSTRACT

In this technical era information plays vital role in any once life. Likewise for a University sharing of the features, placements, faculty, student's achievements, location etc. are important and this can be achieved easily by maintaining a website because it will be available throughout the globe and updating of the website lets include the new features and new data so that everyone can see the same.

This website is user friendly and responsive that is whatever the size the viewing experience makes to comfortable to look in to it. Basically websites gives best experience in the laptops, desktops but making the site as responsive the same thing can be achieved through the small size screens like tablets, mainly phones.

The website is now responsive and better than the existing now
<https://localhost/Project/gitam/index.php>

Generally a website describes the overview of something. For University description of the features, entity of the campus, location says the nature, facilities, teaching staff all are available in the website of their own.

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1. Introduction

In this technical era information plays vital role in any once life. Likewise for a University sharing of the features, placements, faculty, student's achievements, location etc. are important and this can be achieved easily by maintaining a website because it will be available throughout the globe and updating of the website lets include the new features and new data so that everyone can see the same.

This website is user friendly and responsive that is whatever the size the viewing experience makes to comfortable to look in to it. Basically websites gives best experience in the laptops, desktops but making the site as responsive the same thing can be achieved through the small size screens like tablets, mainly phones.

This website enhances the popularity of the college within less time as it is available over the internet because many of them now a day's most of the people first prefer to check details and visit later on.

The system allows admin to updates the events quickly in online notice board and those are reflected on user side so user can get updates .In this website the admin no need to worry on data by single click admin can update events and more. It uses PHP and MySQL database. It has two modules i.e.

Admin:

Admin is the super user of the website who can manage everything on the website. Admin can log in through the login page and can manage whole website for example he can update events on login.

User:

User can visit the application through a URL.

1.1 Purpose

The website describes over all facilities, features and other details. All those details are available in this campus website to enhances productivity in future

1.2 System Scope

Scope of the software:-

- Shows the events and updates
- Displays students reviews
- Lists the courses available
- Lists the placements
- Library management
- Events updates by admin

2. System Study

This chapter deals with the analysis of the system proposed by our guide. It covers the features, advantages and disadvantages of both the system.

2.1 Advantages

- Focus more in administration instead of advertisement
- High computing computers are not required
- Available to users, all the time
- Responsiveness of website makes users to in multiple sizes
- Eco-friendly to admin
- Admin can update the events easily
- Available for multiple screen sizes
- Available for mobile phones also

2.2 Disadvantages

- Not flexible in flip and foldable phones
- Data may not be perfect human error
- Data may not be correct if it's not updated
- Security issues may raise if not get updated

2.3 Proposed System

The proposed system is having many advantages over the existing system. It requires much less overhead and very efficient.

2.3.1 Economical feasibility

Economic analysis is the most frequently used method for evaluating the effectiveness of a new system. More commonly known as cost/benefit analysis, the procedure is to determine the benefits and savings that are expected from a candidate system and compare them with costs. If benefits outweigh costs, then the decision is made to design and implement the system.

2.3.2 Technical feasibility

The technical feasibility in the proposed system deals with the technology used in the system. It deals with the hardware and software used in the system whether they are of latest technology or not. It happens that after a system is prepared a new technology arises and the user wants the system based on that technology. Thus it is important to check the system to be technically feasible.

2.3.3 Operational feasibility

The project has been developed in such a way that it becomes very easy even for a layman with little computer knowledge to operate it. The software is very user friendly and does not require any technical person to operate. Thus the project is even operationally feasible.

2.4 Overview of Software

LAMP stack: JavaScript - Linux - Apache - MySQL - PHP

APACHE

The Apache HTTP Server Project is an effort to develop and maintain an open-source HTTP server for modern operating systems including UNIX and Windows. The goal of this project is to provide a secure, efficient and extensible server that provides HTTP services in sync with the current HTTP standards. The Apache HTTP Server was launched in 1995 and it has been the most popular web server on the Internet since April 1996. It has celebrated its 20th birthday as a project in February 2015.

PHP

- PHP stands for PHP: Hypertext Preprocessor.
- PHP is a server-side scripting language, like ASP.
- PHP scripts are executed on the server.
- PHP supports many databases (MYSQL, Informix, Oracle, Sybase, Solid, Generic ODBC, etc.).
- PHP is an open source software.
- PHP is free to download and use.

MYSQL

- MYSQL is a database server
- MYSQL is ideal for both small and large applications
- MYSQL supports standard SQL
- MYSQL compiles on a number of platforms
- MYSQL is free to download and use
- How to access MySQL:
- <http://localhost/phpmyadmin>

2.5 Hardware Specification

User side:

- Not required any hardware.
- Required only internet access and computer.

Server side:

Ram	4GB
Hard disk	1TB
Processor	2.4GHz
Operating System	Server side OS like Unix

2.6 Software Requirement

Front End	HTML,CSS ,jquery,java script
Server side Language	PHP
Database Server	MySql
Web Browser	Firefox , Google Chrome or any compatible browser
Operating System	Ubuntu,Windows or any equivalent OS
Software	xampp

3. System Design

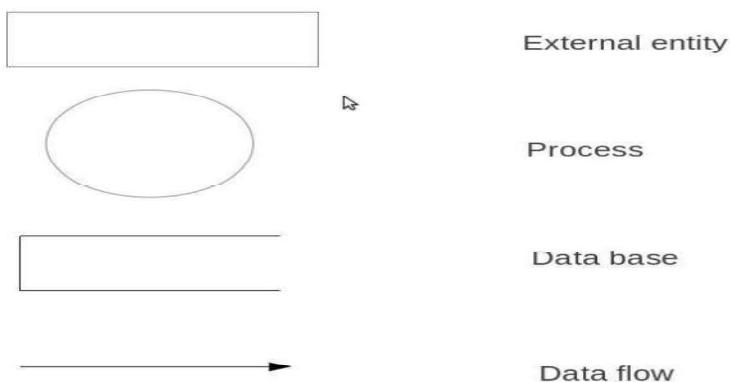
The system design is needed for information processing technology and the user interface development analysis. It contain a high level overview of the organization in which the common activities, processes and products are described in relation to how they create, use and modify information.

Below given dfd's can be used to describe the overall user interface:

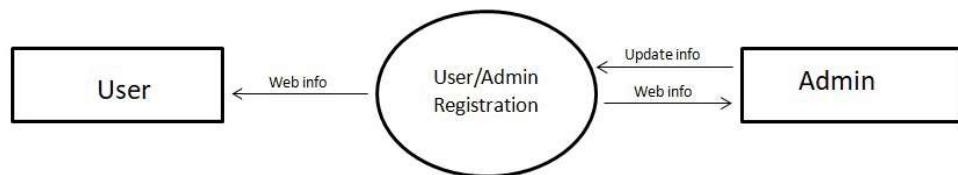
3.1 DFD Diagrams

Data Flow Diagram

Notation Used

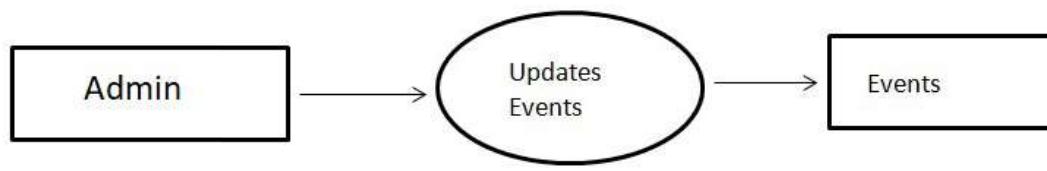


LEVEL- 0 DFD:



DFD Diagram

LEVEL-1.1 DFD:



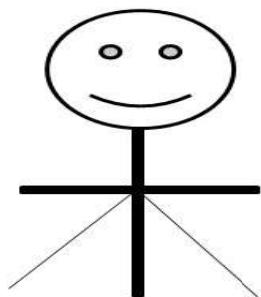
DFD Diagram

3.2 UML Diagrams:

Actor:

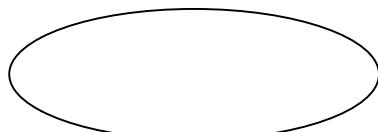
A coherent set of roles that users of use cases play when interacting with the use cases.

An observable result of value of an actor.

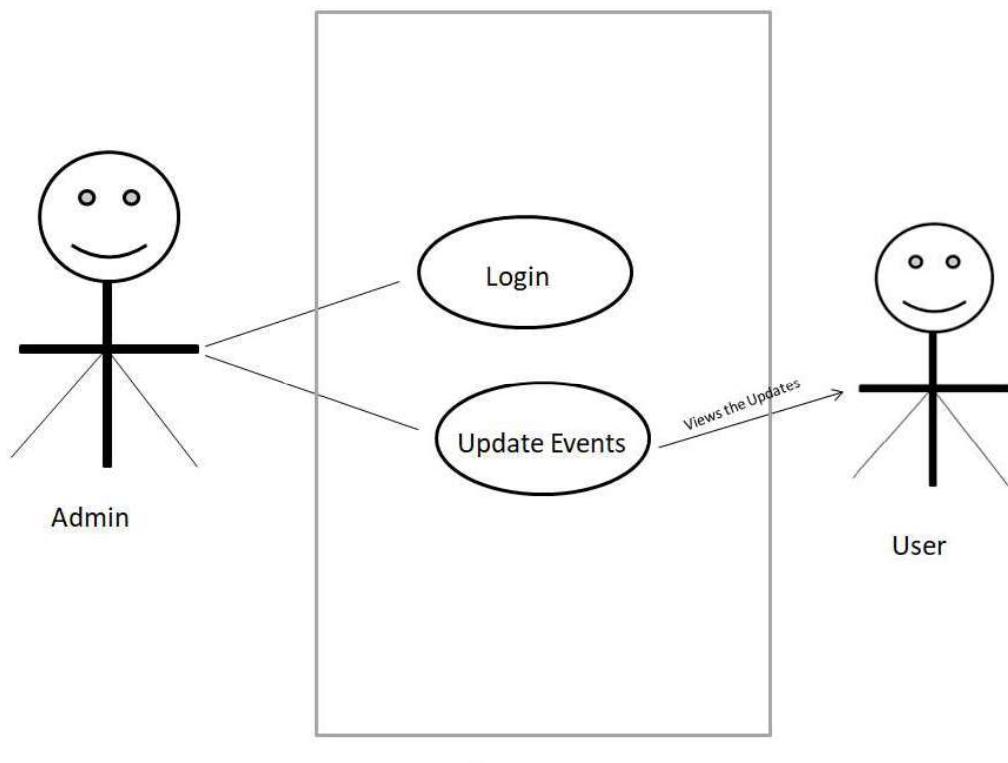


Use case:

A description of sequence of actions, including variants, that a system performs yields an observable result of value of an actor. actor diagram is drawn in a eclipse shape.



UML stands for Unified Modelling Language. UML is a language for specifying, visualizing and documenting the system. This is the step while developing any product after analysis. The goal from this is to produce a model of the entities involved in the project which later need to be built. The representation of the entities that are to be used in the product being developed need to be designed.



Use Case Diagram

4. System Testing

System testing is normally carried out in a planned manner according to the system test plan document. The system test plan identifies all testing-related activities that must be performed, specifies the schedule of testing, and allocates resources. It also lists all the test cases and the expected outputs for each test case. Here the modules are integrated in a planned manner.

4.1 Functional Testing

Functional testing refers to tests that verify a specific action or function of the code. These are usually found in the code requirements documentation, although some development methodologies work from use cases or user stories. Functional tests tend to answer the question of "can the user do this" or "does this particular feature work". Some examples of functional testing done in our project:

- By checking all the login modules, it is ensured that only registered users can access all the facilities.

4.2 Structural Testing

Structural testing is also called White box testing. This means a testing technique whereby explicit knowledge of the internal workings of the item being tested is used to select the test data. White box testing uses specific knowledge of programming code to examine outputs. The test is accurate only if the tester knows what the program is supposed to do. He or she can then see if the program diverges from its intended goal. White box testing does not account for errors caused by omission, and all visible code must also be readable.

4.3 System Testing

System testing of software or hardware is testing conducted on a complete, integrated system to evaluate the system's compliance with its specified requirements. System testing falls within the scope of black box testing, and as such, should require no knowledge of the inner design of the code or logic.

As a rule, system testing takes, as its input, all of the "integrated" "software components that have successfully passed integration testing and also the software system itself integrated with any applicable hardware system(s). The purpose of integration testing is to detect any inconsistencies between the software units that are integrated together (called assemblages) or between any of the assemblages and the hardware. System testing is a more limiting type of testing; it seeks to detect defects both within the "inter-assemblages" and also within the system as a whole.

System testing is performed on the entire system in the context of a Functional Requirement Specification(s) (FRS) and/or a System Requirement Specification (SRS). System testing is an investigatory testing phase, where the focus is to have almost a destructive attitude and tests not only the design, but also the behaviour and even the believed expectations of the customer. It is also intended to test up to and beyond the bounds defined in the software/hardware requirements specification(s).

4.3.1 Test Cases

A test case in software engineering is a set of conditions or variables under which a tester will determine whether an application or software system is working correctly or not.

Unit Test Cases

The software is being divided into different components and unit testing is performed on each of these modules. This section is repeated for all components.

Integration Test cases

Integration testing is a part of stress testing which involves integrating the components to create a system or sub-system. It may involve testing an increment to be delivered to the customer. In integration testing, the test team has access to the system source code. The system is tested as components are integrated.

Validation Test cases

This testing is done to see whether the integrated software is valid according to the user needs.

5. Database Schema

The goal of database design is to ensure that the data is represented in such a way that there is no redundancy and no extraneous data is generated, thus generate relationship in as high an order as possible. Having identified all the data on the system it is necessary to at the logical database design. Database design involves designing the conceptual model of the database. This model is independent of the physical representation of the data. Once the conceptual model is designed, it can be mapped to the DBMS/RDBMS that is actually being used.

Following are tables that have been used in this project:-

Table 1: Admin Table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	id	int(11)			No	None		AUTO_INCREMENT
2	user_name	varchar(150)	utf8mb4_general_ci		No	None		
3	pass_word	text	utf8mb4_general_ci		No	None		

Table 2: Admin Details

id	user_name	pass_word
1	0hemanthbabu0ssetti0@gmail.com	1234
2	user	user
3	r170396@rguktrkv.ac.in	1234567890
4	raju@gmail.com	pqwerty1234
5	j	k
6	dfghjkl;	dfghjkl

Table 3: Events table

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra
1	id 	int(20)			No	<i>None</i>		AUTO_INCREMENT
2	userid	varchar(100)	utf8mb4_general_ci		No	<i>None</i>		
3	title	varchar(200)	utf8mb4_general_ci		No	<i>None</i>		
4	content	text	utf8mb4_general_ci		No	<i>None</i>		

Table 4: Events Details

id	userid	title	content
26	user	gitam	
27	user	gitam	
28	user	gitam	
29	user	hemanth	full stack developer
30	user	(12-09-2022)	
31	user	SEM-2 E3 results has been updated (17-09-2022)	
32	user	SEM-2 E3 results has been updated (17-09-2022)	SEM-2 E3 results has been updated (17-09-2022) SE...
33	user	SEM-2 E3 results has been updated (17-09-2022)	SEM-2 E3 results has been updated (17-09-2022) SE...
34	user	SEM-2 E3 results has been updated (17-09-2022)	SEM-2 E3 results has been updated (17-09-2022) SE...
35	user	SEM-2 E3 results has been updated (17-09-2022)	SEM-2 E3 results has been updated (17-09-2022) SE...
36	user	SEM-2 E3 results has been updated (17-09-2022)	SEM-2 E3 results has been updated (17-09-2022) SE...

6. Conclusion

The software is designed in such a way that future modifications can be done easily. The following conclusions can be deduced from the development of the project:-

- Automation of the tire system improves the efficiency..
- This application will avoid the manual work.
- Updating of information becomes so easier.
- It gives appropriate access to the authorized users depending on their permissions.

It records all events entered by the admin, these data can be processed for productivity. These data is used for display the on notice board for users. So the admin and authority persons don't worry about the loss of data. Easily updates the data no need to update data on multiple places, once the data is entered then in respected areas it automatically updates the data.

7. List of Figures

The screenshot shows the homepage of the Rajiv Gandhi University of Knowledge Technologies, Andhra Pradesh (AP). The header features the university's name in English and Telugu, along with its motto "Catering to the Educational Needs of the Gifted Rural Youth of Andhra Pradesh" and its constitution under the AP Govt. Act 18 of 2008. Below the header is a navigation bar with links for Home, Institute, Academics, Students, Departments, Placements, Library, Grievances, Contact, and ECAP Login. The main content area displays a large grid of logos for various Information Technology companies, including Wipro, Capgemini, Cognizant, Hexaware, SkillSync, TCS, DXC Technology, Tech Mahindra, diamondpick, cogito, Cadence, HCL, Infosys, MAQ Software, DeltaX, Tata Communications, Mindtree, Mphasis, Zoho, Tavant Technologies, Hidden Brains, Siemens, Larsen & Toubro, IBM, Bluebird, Deloitte, virtusa, and Atos. To the right of the grid is a sidebar titled "Events & Updates" which lists recent activities such as work under guidance of Mr. Ravi Kumar, site responsiveness, ECAP login enablement, industrial visits, and SEM-2 E3 results.

This screenshot shows a section of the university's website with a light orange header. It features two main buttons: "Admission Form" with a download icon and "Placement 2021-22" with a trophy icon. Below this is a dark grey box containing the heading "STUDENTS REVIEW". Inside the box is a red testimonial box with the text: "For me, it was majorly about changing my domain and I was able to do that. If value to you means higher monetary compensation, I think it is a very good option, as all of us were placed at least 1.5X times our compensation prior to doing this course." Navigation arrows are present at the top and bottom of the testimonial box. Below the testimonial is the name "A.Sravani-Project Engineer(Wipro)".

This screenshot shows a section of the university's website with an orange header. The title "Accreditations & Affiliations & Certifications" is centered above three circular logos. From left to right, the logos are: 1) A white gear-shaped logo with a small emblem in the center. 2) A blue certificate from "Gouthami Institute Of Technology & Management For Women" dated October 2019, certifying ISO 9001:2015 certification. 3) The official seal of the "STATE BOARD OF TECHNICAL EDUCATION AND EXAMINATIONS ANDHRA PRADESH". 4) The official seal of "JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY".

Courses

CSE **ECE** **EEE** **DIPLOMA**

4000+
DEGREES AWARDED

4500+
PLACEMENTS

450+
RESEARCH PUBLICATIONS

4000+
PROJECTS

 **Rajiv Gandhi University of Knowledge Technologies, AP**
రాజీవ్ గాంధీ వైజ్ఞానిక సాంకేతిక విశ్వవిద్యాలయం, ఆంధ్ర
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(Constituted under the AP Govt. Act 18 of 2008 and recognized as per Section 2(f) of UGC Act, 1956)

Rajiv Knowledge Valley

Home Institute ▾ Academics ▾ Students ▾ Departments ▾ Placements Library Grievances Contact ECAP Login

Diploma
B.Tech ▾

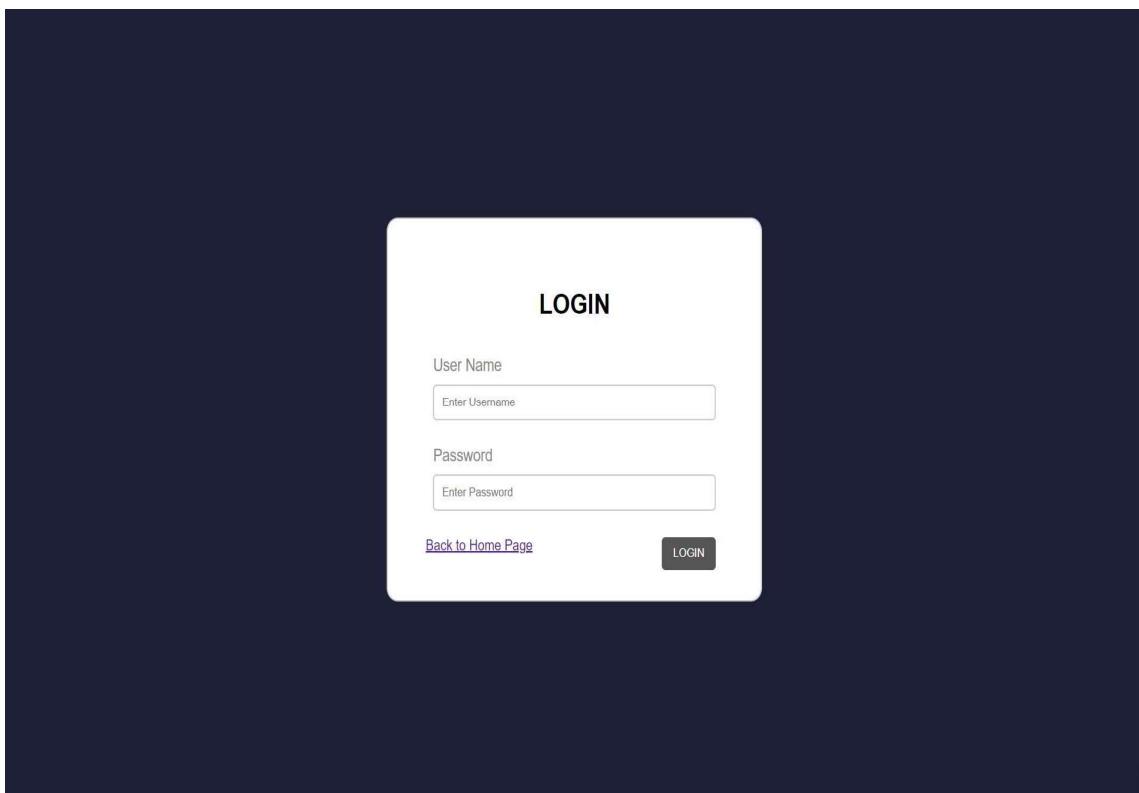
CSE
ECE
EEE
HS

Events & Updates

ONLINE NOTICE BOARD



localhost/Project/param/index.php#



 **Rajiv Gandhi University of Knowledge Technologies, AP**
రాజీవ్ గాంధీ వైజ్ఞానిక సాంకేతిక విశ్వవిద్యాలయం, ఆంధ్రప్రదేశ్
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(Constituted under the AP Govt. Act 18 of 2008 and recognized as per Section 2(f) of UGC Act, 1956)

Rajiv Knowledge Valley 

[Home](#) [Logout](#)

New Events

Title

Content

Events

Event id	Event	Description
56	Work was done under guidance of Mr. Ravi Kumar	Assistant Professor, IIIT RK Valley
55	Site has been made responsive (R170648)	S. HEMANTH BABU
54	ECAP Login Enabled (18-09-2022)	ECAP Login Enabled (18-09-2022)
53	Industrial visit by EEE Students (18-09-2022)	Industrial visit by EEE Students (18-09-2022)
52	SEM-2 E3 results has been updated (17-09-2022)	SEM-2 E3 results has been updated (17-09-2022)
51	Nagendra and Raju made app (1222222)	MAD
50	SEM-2 E3 results has been updated (17-09-2022)	
49	zxbc,nbnv	MVBNXvbcnn
48	zxbc,nbnv	MVBNXvbcnn
47	xdclvgbhjnmk	szxcfgvhbjnkm

8. References

For HTML, CSS, Javascript :

<https://www.w3schools.com/html/default.asp>

<https://www.w3schools.com/css/default.asp>

<https://www.w3schools.com/js/default.asp>

<https://www.youtube.com/c/Freecodecamp>

For PHP:

<https://www.w3schools.com/php/default.asp>

<https://www.sitepoint.com/php/>

<https://www.php.net/>

For MySQL:

<https://www.mysql.com/>

<http://www.mysqltutorial.org>

For XAMPP:

<https://www.apachefriends.org/download.html>

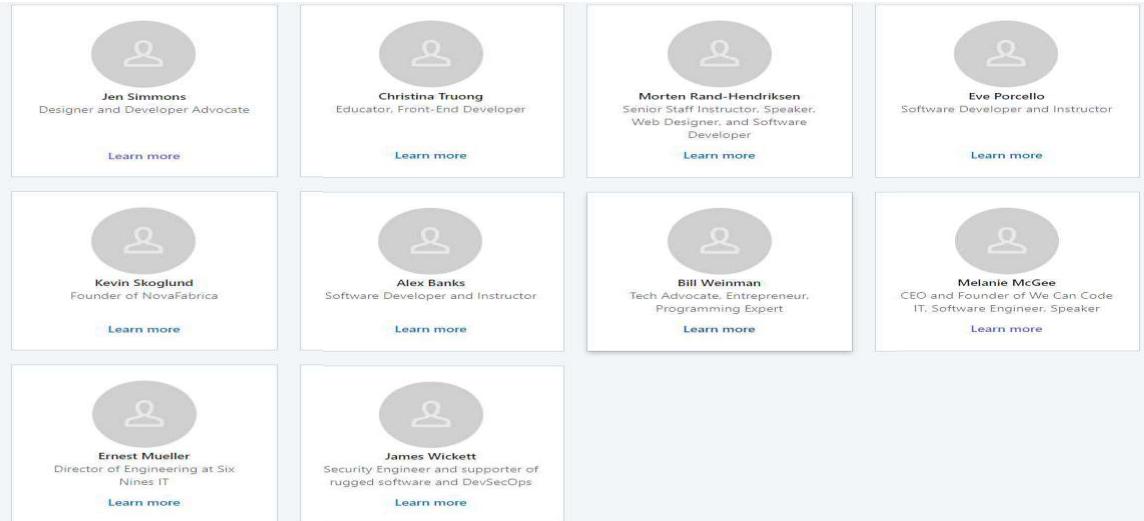
Udemy:

The Complete 2022 Web Development Bootcamp-Dr. Angela Yu

LinkedIn Learning:

Become a Full-Stack Web Developer

Instructors:



*****THANKYOU*****