# A Project Report

# on

# Project Pulse

*Submitted by*

### AMAN RAVINDRA BARIYA (210303108055)

**DHAVAL S BAVDA (210303108263)**

### HARSH AJAY (210303108048)

### MEERA MUKESHBHAI DOBARIYA (210303108075)

*Under the Guidance of*

**MR. SHALEEN SHUKLA**

### Assistant Professor

*In partial fulfillment for the award of the degree of*

**BACHELOR OF TECHNOLOGY**

***in***

**INFORMATION TECHNOLOGY**

****

**PARUL INSTITUTE OF ENGINEERING AND TECHNOLOGY,**

**PARUL UNIVERSITY,**

**VADODARA, GUJARAT**

[2023-2024]

# A Project Report

# on

# Project Pulse

***Submitted in partial fulfillment of the requirement for the award of the degree***

***of***

**Bachelor of Technology**

***in***

**Information Technology**

*by*

### AMAN RAVINDRA BARIYA (210303108055)

**DHAVAL S BAVDA (210303108263)**

### HARSH AJAY (210303108048)

### MEERA MUKESHBHAI DOBARIYA (210303108075)

### Under Supervision of

### MR. SHALEEN SHUKLA

### Assistant Professor

### 

**DEPARTMENT OF INFORMATION TECHNOLOGY,**

**PARUL INSTITUTE OF ENGINEERING AND TECHNOLOGY,**

**PARUL UNIVERSITY,**

**VADODARA, GUJARAT**

April 2024

### CERTIFICATE

This is to certify that the Project Report entitled, “**Project Pulse**” submitted by “**Aman Ravindra Bariya (210303108055)**” to **Parul** **University, Vadodara, Gujarat**, is a record of bonafide Project work carried out by them under my supervision and guidance, and is worthy of consideration for the award of the degree of **Bachelor of Technology** in **Information Technology** of the University.

Date :

Place :

|  |  |  |
| --- | --- | --- |
| Supervisor  Mr. Shaleen Shukla  Assistant Professor |  | Project Coordinator  Ms. Dhenuka Patel  Assistant Professor |
|  |  |  |
| Head, Dept. of Information Technology  Dr. Pooja Sapra |  | External Supervisor  Name:  Designation: |

### CERTIFICATE

This is to certify that the Project Report entitled, “**Project Pulse**” submitted by “**Dhaval S Bavda (210303108263)**” to **Parul** **University, Vadodara, Gujarat**, is a record of bonafide Project work carried out by them under my supervision and guidance, and is worthy of consideration for the award of the degree of **Bachelor of Technology** in **Information Technology** of the University.

Date :

Place :

|  |  |  |
| --- | --- | --- |
| Supervisor  Mr. Shaleen Shukla  Assistant Professor |  | Project Coordinator  Ms. Dhenuka Patel  Assistant Professor |
|  |  |  |
| Head, Dept. of Information Technology  Dr. Pooja Sapra |  | External Supervisor  Name:  Designation: |

### CERTIFICATE

This is to certify that the Project Report entitled, “**Project Pulse**” submitted by “**Harsh Ajay (210303108048)**” to **Parul** **University, Vadodara, Gujarat**, is a record of bonafide Project work carried out by them under my supervision and guidance, and is worthy of consideration for the award of the degree of **Bachelor of Technology** in **Information Technology** of the University.

Date :

Place :

|  |  |  |
| --- | --- | --- |
| Supervisor  Mr. Shaleen Shukla  Assistant Professor |  | Project Coordinator  Ms. Dhenuka Patel  Assistant Professor |
|  |  |  |
| Head, Dept. of Information Technology  Dr. Pooja Sapra |  | External Supervisor  Name:  Designation: |

### CERTIFICATE

This is to certify that the Project Report entitled, “**Project Pulse**” submitted by “**Meera Mukeshbhai Dobariya (210303108075)**” to **Parul** **University, Vadodara, Gujarat**, is a record of bonafide Project work carried out by them under my supervision and guidance, and is worthy of consideration for the award of the degree of **Bachelor of Technology** in **Information Technology** of the University.

Date :

Place :

|  |  |  |
| --- | --- | --- |
| Supervisor  Mr. Shaleen Shukla  Assistant Professor |  | Project Coordinator  Ms. Dhenuka Patel  Assistant Professor |
|  |  |  |
| Head, Dept. of Information Technology  Dr. Pooja Sapra |  | External Supervisor  Name:  Designation: |

**ACKNOWLEDGEMENT**

Behind any major work undertaken by an individual there lies the contribution of the people who helped them to cross all the hurdles to achieve their goal.

It gives us the immense pleasure to express our sense of sincere gratitude towards our respected guide (Assistant Professor) **Prof. Shaleen Shukla** for his persistent, outstanding, invaluable co-operation and guidance. It is our achievement to be guided under him. He is constant source of encouragement and momentum that any intricacy becomes simple. We gained a lot of invaluable guidance and prompt suggestions from him during entire project work. We will be indebted of him forever and we take pride to work under him.

We also express our deep sense of regards and thanks to **Prof. Pooja Sapra**, (Associate Professor) and Head of INFORMATION TECHNOLOGY Engineering Department. We feel very privileged to have had their precious advices, guidance and leadership.

Last but not the least, our humble thanks to the Almighty God.

### Aman Ravindra Bariya (210303108055)

**Place: Vadodara Dhaval S Bavda (210303108263)**

**Date: 21/03/2024 Harsh Ajay (210303108048)**

### Meera Mukeshbhai Dobariya (210303108075)

### ABSTRACT

### Project Pulse will be implemented for all student projects across all faculties at university during their final year.

### Project Pulse is a user-friendly and results-oriented platform that supports students in various activities related to their final year projects at university level. Project Pulse is being developed to provide students with mentoring opportunities from various experts in addition to guidance from their faculty advisors. This platform will generate interfaces to filter projects based on different technological fields, aligning with the interests and expertise of the mentors. Students are required to upload their periodic progress reports, and mentors can offer guidance based on the submitted work. Upon completion of the project in the final year (i.e., 8th semester), a certificate will be generated.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sr. No.** | **Title** | **Author** | **Approach**  **(Methodology)** | **Advantages** | **Limitations** |
| 01 | Importance of responsive web design for education of students using faculty website  2016 | Pavle Dakić, University Singidunum,  Stefan Kocić, Union University Belgrade,  Miloš Popović, University Singidunum | The paper analyzes the importance of responsive web design (RWD) in the context of educational institutions, focusing on Belgrade Business School's faculty website.. | Improved user experience and accessibility across devices. Enhanced mobile-friendliness, catering to the dominant mobile browsing trend. | It lacks empirical data or case studies to directly demonstrate the impact of RWD on Belgrade Business School's website. |
| It draws upon existing research and trends in mobile device usage and SEO to advocate for RWD implementation. | Strengthened visual communication and aesthetics on different platforms. Potential boost in SEO ranking and website visibility. | The paper does not delve into the specific implementation process or technical details of RWD. |
| 02 | Responsive or Adaptive Educational Mobile Websites: The Impact of Different Designs on Students’ Preferences at Jouf University – Saudi Arabia  2019 | Assist. Prof.  Dr. Mohammed H. Ragab Khalaf | Developed two mobile learning websites: responsive (RW) and adaptive (AW). Divided students into two groups: RW and AW users. | Provided insights for designing mobile websites that cater to diverse device characteristics. Highlighted the importance of effective design in enhancing student preference for mobile learning platforms. | The current research limited to designing the third chapter entitled “communication skills in university environment” in the course named “university life skills” by Dr. Abdul Majid El Grewy, the major reference to the course. |
| The quasi-experimental methodology was followed; two experimental groups with no control group design, to examine the following research hypothesis | Single responsive design for multiple devices: Eliminates the need for separate designs for each device. Dynamic resizing and rearrangement of content: Adapts to different screen sizes and resolutions. | Did not explore long-term impact of design preferences on learning outcomes. Focused solely on student preferences, neglecting other factors like learning effectiveness or technical complexities |
| 03 | Project Managers’ Competencies in Collaborative Construction Projects  2020 | Sina Moradi,  Kalle Kahkonen,  Kirsi Aaltonen | The study employed two different data collection techniques, including a web-based questionnaire and semi-structured interviews. | Collaborative delivery methods create an operational environment conducive to enhanced interaction and cooperation among diverse project stakeholders. | Collaborative construction projects and their managerial solutions are relatively new fields, resulting in limited prior research on aspects such as project managers' competencies.. |
| The web-based questionnaire was utilized to identify project managers’ competencies by evaluating the frequency and type of their behaviors related to their everyday work. | The use of a web-based questionnaire and semi-structured interviews facilitates comprehensive data collection from case projects, ensuring a thorough analysis of project managers' behaviors and competencies. | Data collection relies on project managers' self-reported behaviors and experiences, which may introduce bias or subjectivity into the analysis.. |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 04 | Cloud-based outsourcing framework for efficient IT project management practices  2020 | DP Sharma,  PhD | The research utilized a mixed data analysis approach to systematically and carefully investigate the adaptation and improvement of ICT-enabled project management practices in an outsourced environment. | By adopting cloud-based outsourcing in IT project management practices, organizations can optimize the utilization of human resources, particularly in regions with shortages of high-skilled IT professionals. | Successful implementation of cloud-based outsourcing relies heavily on the availability and capacity of ICT infrastructure, which may be limited in developing countries like Ethiopia. |
| Salient stakeholders' views were collected and analyzed to inform the design of a cloud-based outsourcing IT project management framework tailored to the Ethiopian IT industry. | Cloud-based outsourcing enables organizations to overcome challenges such as rapid attrition and physical migration of IT professionals by providing a flexible and adaptable working environment. | Outsourcing IT project management to the cloud may raise concerns about data security and privacy, particularly when sensitive information is involved. |
| 05 | Evaluating the effects of responsive design on the usability of academic websites in the pandemic  2021 | Alaattin Parlakkiliç | The approach involved conducting a questionnaire survey among university students using a five-point Likert scale to assess the impact of responsive design on usability. | Responsive design facilitates usability across various devices, allowing students to access academic websites seamlessly, which is particularly crucial during the COVID-19 pandemic. | Findings may be limited to the specific demographic of university students surveyed and may not fully represent other user groups or contexts. |
| Demographic analysis was performed to evaluate correlations between students' characteristics (age, gender, internet access method) and their attitudes towards responsive design. | Implementing responsive design reduces the need to create and maintain multiple versions of websites for different devices, thus saving costs and time associated with design, updates, and maintenance. | The usability and effectiveness of academic websites may also be influenced by external factors beyond responsive design, such as internet connectivity, device performance, and individual preferences |