

INTERNSHIP REPORT

REPORT OF INTERNSHIP DONE AT NATIONAL INFORMATICS CENTER –GOA

SUBMITTED BY:

PRATEEK PRADEEP SATARDEKAR

1952

UNDER THE GUIDANCE OF

Ms. DIPTI KAMAT (Senior Software Engineer)

MR.K.V RAMANATHAN (TECHNICAL DIRECTOR, NIC-SECRETARIAT)

Table of Contents:

- 1) Certificate of evaluation
- 2) Internship certificate
- 3) Acknowledgement
- 4) Introduction
- 5) Company Profile
- 6) Project Goa budget portal
- 7) Project screenshots
- 8) Project: Dayanand social security scheme
- 9) Project screenshots
- 10) Tools and Technologies Used
- 11) My reflections/ experiences of internship

भारत सरकार संचार और सूचना प्रौद्योगिकी मंत्रालय सूचना प्रौद्योगिकी विभाग राष्ट्रीय सूचना - विज्ञान केंद्र गोवा राज्य केंद्र एच् व्लॉक, पारैसो डी गोवा पर्वरी, गोवा - 403 521

दूरभाष: (0832) 2415545/2410160/2410816



GOVERNMENT OF INDIA
MINISTRY OF COMMUNICATIONS &
INFORMATION TECHNOLOGY
DEPARTMENT OF INFORMATION TECHNOLOGY

NATIONAL INFORMATICS CENTRE

Goa State Centre
H Block, Paraiso de Goa
Porvorim, Goa - 403 521
Tel.: (0832) 2415545/2410160/2410816

Email : sio-goa@nic.in Website : www.nicgoa.nic.in

No. MEIT/NIC/GOA/SECT/2022/32

Dated: 07/06/2022

INTERNSHIP CERTIFICATE

This is to certify that Mr.Prateek Pradeep Satardekar, Final year MCA studying of Goa University is working as an Intern at NIC – Goa Secretariat from 01/02/2022 to till date and has completed the projects assigned under our guidance during his internship period.

We found that Mr. Prateek Pradeep Satardekar has good knowledge of Programming skills and deliver with minimum supervision. We present this certificate in appreciation for the work done during the internship period.

Ramanathan)
Technical Director



GOA BUSINESS SCHOOL CERTIFICATE OF EVALUATION

This is to certify that Mr. Prateek Pradeep Satardekar has been evaluated for the project work titled "Report of Internship done at National informatics centre" undertaken at National informatics centre -Goa in partial fulfilment for the award of the degree in Master of Computer Application.

| | Examiner 1 | | | |
|-----------------------|------------|----|---------------|------------|
| | Examiner 2 | | | |
| Place: Goa University | / | | | |
| | | De | an, Goa Busin | ess School |
| Date: | | | | |

Acknowledgement

Interning in a company is an excellent opportunity for learning and selfdevelopment specially to have so many wonderful people led me through this internship period. The internship would not be complete without expressing my gratitude and appreciation to all the people who made it possible. I would like to thank Mr. k,v ramanathan (technical director) for giving me the opportunity to intern at NIC porvorim. My sincerest gratitude to Ms. Dipti kamat (Senior Software Engineer, NIC porvorim) and Ms.kirti Rani(Software Engineer, NIC porvorim) for being my mentor and giving me the necessary guidance and support. I would like to extend my gratitude to my colleague's chetna mahatme and amrita tari for being my friends and always helping me out whenever I was in dire need. Mr. Ramdas Karmali (Prof. and TPO, MCA, Goa Business School, Goa University), Mr. Jarret Stevan Anthony Fernandes (Assistant Prof, MCA, Goa Business School, Goa University) and all the faculty of MCA, Goa University for their constant encouragement and support during the project work. Finally, I would like to express my gratitude towards the NIC family who were always ready to help me and guide me in all aspects of life. They have transformed me into a new and renewed person ready to face head-on any challenges that come my way. –Prateek satardekar

Introduction

This report is a short description of my full-time on-site internship at National informatics center -Goa. I joined as an Intern at National informatics center -Goa on 2nd Febraury 2022 and have been here since then. This report contains necessary information about the organization, the projects and mini projects I worked on and the other tasks and special trainings I completed in this internship period. In the chapters that will follow, I will talk about the company, the work here, the culture, etc. Then, I shall elaborate on the projects I worked on, a brief information about the projects, the modules I built and the tasks I completed in those modules. This report highlights my learning experience and my contributions to the organization as an intern. This will describe the knowledge that I gained by successfully completing the tasks that were assigned to me. I'll also be talking about the tools and technologies that were used followed by my internship timeline. I shall conclude by sharing my experience and how it has helped me to grow, both, on the personal and professional front.



National Informatics Centre (NIC) under the Ministry of Electronics and Information Technology (MeitY) is the technology partner of the Government of India. It was established in 1976 with an objective to technology-driven solutions Central to and Governments in various aspects of development. NIC has been adopting and providing Information instrumental in Communication Technology (ICT) and eGovernance support to Central Government. Its state-of-art IT infrastructure includes Multi-Gigabit PAN India Network NICNET, National Knowledge Network, National Data Centres, National Cloud, Video Conferencing, Email and Messaging Services, Command and Control Centre, Multi-layered GIS based Platform, Domain Registration and Webcast.NIC has also developed several digital platforms for the socio-economic development of the country with 'One-Nation One-Platform' initiative to empower citizens digitally. Its services have created a perfect interaction of the Government with citizens, Government employees and businesses. With an objective of focused study of new technology, explore and experiment their use in governance, NIC has set-up Centre of Excellence(CoE) in Data Analytics, Artificial Intelligence, Blockchain and Application Security. With an advanced and robust infrastructure, digital platforms as well as on-ground services, NIC is connecting the citizens with the government through a holistic digital landscape and it ensures tech-enabled services that reach the unreached.

Services provided by National Informatics Centre

- Implementation of National and State Level e-Governance Projects
- Products and Services
- Consultancy to the government departments
- Research and Development
- Capacity Building

Project – Goa budget portal

A state government budget is a state's year-long financial report explaining item-wise calculations of future revenue and expenditure. The budget explains the income and expenses of a state.

In Goa, at the beginning of every year, the government presents its budget in front of the Legislative Assembly, explaining an estimated receipt and expense for the upcoming financial year. The fiscal year starts from 1st April and concludes on 31st March of the next year.



Objective

The objective is to redesign/add features to the existing GoaBudget website to better serve the needs of our current and potential online audiences by providing online information in a coherent and consistent manner.

Scope of Work

The scope of work includes redesigning of the existing website that

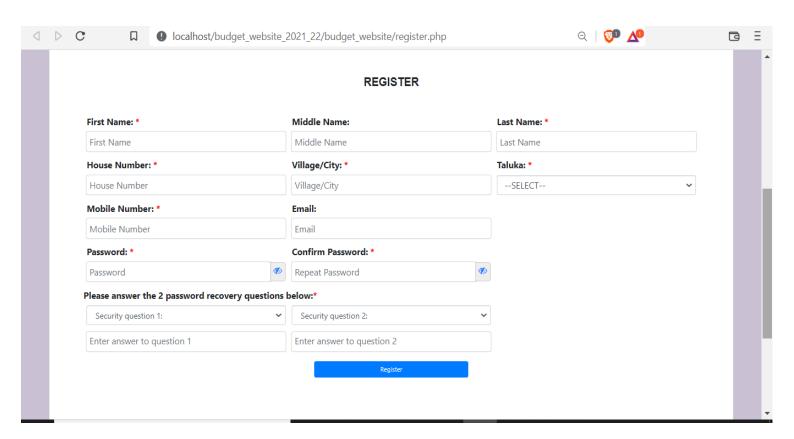
will be offered as a service to government entities and public. Solution must include the front-end user interface that is accessible through a web/mobile app. The solution will have the following features:

- 1. Easy to navigate.
- 2. Mobile Responsive Web design
- 3. Login/Registration form for Admin/Users
- 4. User Suggestion Form User will send in the suggestions related to upcoming Goa budget 2022-
- 5. Admin Dashboard Admin will be able to view/download all the suggestions sent by the users.
- 6. Provide the data related to budget in an organised manner.

Modules Completed:

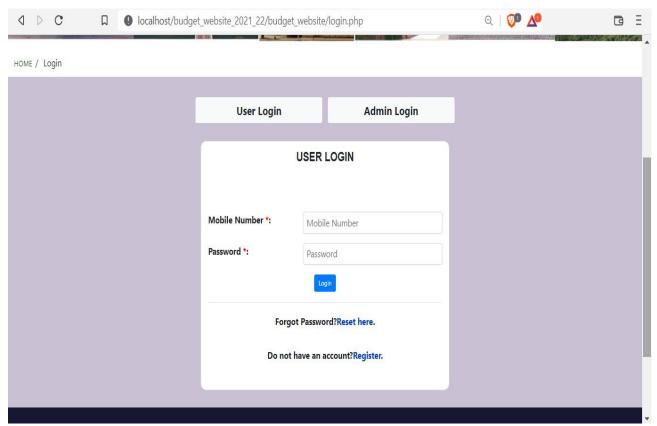
Register

i)Register form with security questions to register on the portal to upload your suggestions.



Login

- i)login with password & mobile number
- ii)login with OTP
- iii)login for admin with username and password



Change Password

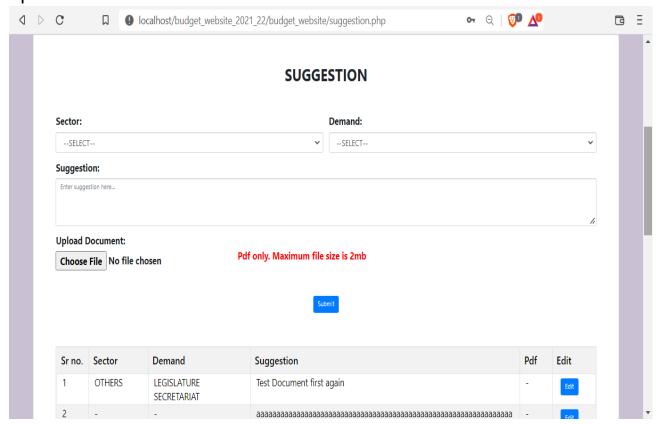
User knows old password and they want to change it.

Forget Password

In case they forget password they have to enter mobile number den security questions page will appear. If they answer correctly then send them to reset password page

Suggestion

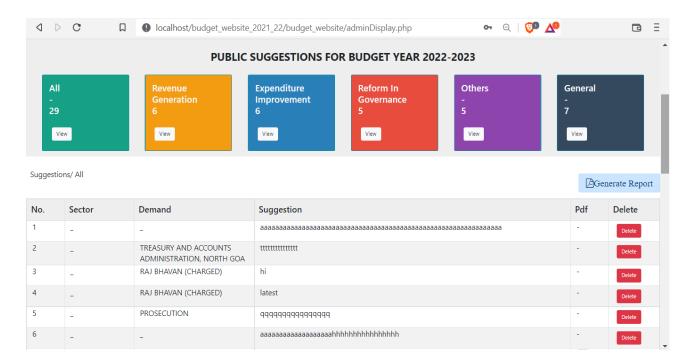
User should select demand, sector from dropdowns. All dropdown options are stored in the database table. So retrive and show in dropdowns. If in dropdown option==others. Input box appears to enter their own sector. Suggestion in Textarea. Upload pdf option. File size upto 2mb.make table for suggestions entered by the user. As soon as user enters a suggestion. It appears in the table with an edit option.



Update Suggestion

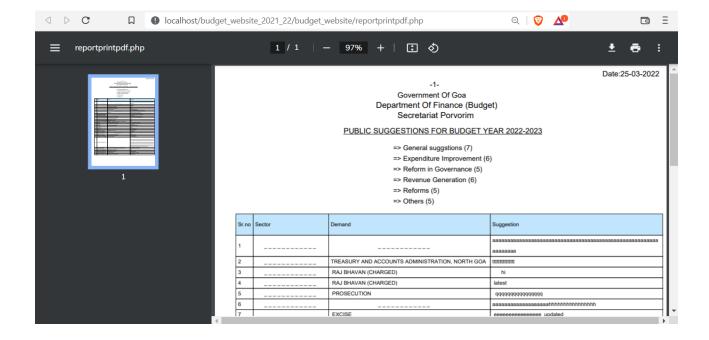
User can edit their previous suggestion. If user makes changes , update it.

Admin: create a dashboard for admin. Where in he can see suggestions category wise. Admin can also delete suggestions



Suggestion Report

Make a report of suggestions given by public. General report and category wise.



Project: Dayanand social security scheme

Goa government has launched Dayanand Social Security Scheme 2022 for senior citizens, single women and disabled persons, The main objective of the DSSS scheme is to provide financial assistance to the most vulnerable sections of society.

The benefits of this scheme are given below:-

- Senior citizens, single women, adult disabled will be <u>eligible for</u> financial assistances at the rate of Rs.2000
- 2000/- per month under the scheme. (As per latest update, assistance to widows is now Rs 2500 per month).
- Disabled children with less than 90% disability will be entitled to financial assistance of Rs. 2500/- per month
- Disabled persons with disability of 90% and above will be eligible for financial assistance of Rs.3500 will be received under Goa Dayanand Social Security Scheme
- Rs.3500/- per month subject to the fulfillment of necessary documents and general conditions, provided that children with disabilities will continue to receive the above mentioned financial assistance after the age of 21 years.



Objective

The objective is to enable citizens to apply for this varies schemes through the website to better serve the needs of citizens by providing online information in a coherent and consistent manner.

Scope of Work

The scope of work includes designing of website that will be offered as a service to government entities and public. Solution must include the front-end user interface that is accessible through a web/mobile app. The solution will have the following features:

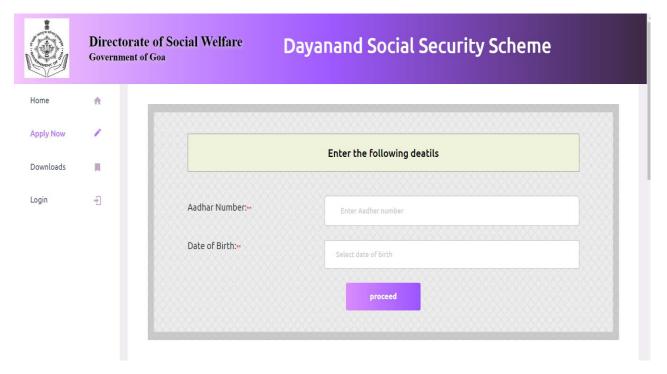
- 1. Easy to navigate.
- 2. Mobile Responsive Web design
- 3. Login/Registration form for Admin/Users
- 4. Provide the data related to schemes in an organised manner.

5. Accept data and documents from user and store in database for further verification.

Modules Completed:

Authenticate

Authenticate user using aadhar card and birth date.



Register

Register form with security questions to register on the portal to upload your details and documents.





Login

Login module is used by the admin the to view the details of applications received for various schemes



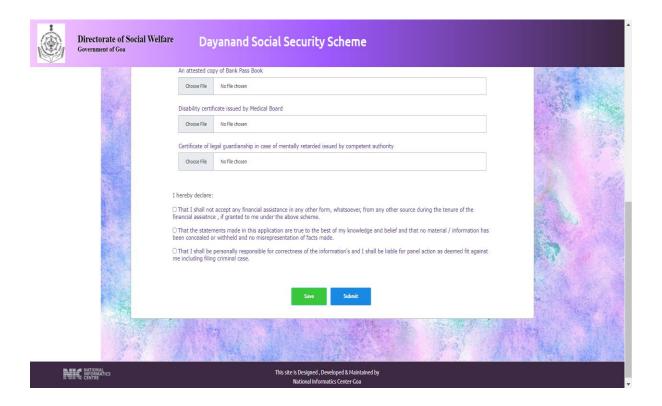
Downloads

Downloads module provides users with download option for various documents to be refered for applying for this schemes.



Document uploads

Document uploads module is used to upload documents as per the category selected and is required to avail the schemes



Tools and Technologies Used

Bootstrap

Bootstrap is a free and open-source CSS framework directed at responsive, mobilefirst front-end web development. It is a framework to help you design websites faster and easier. It includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, image carousels, etc. It also gives you support for JavaScript plugins. Advantages of Bootstrap are Easy to use, Responsive features, Mobile-first approach and Browser Compatibility.

Ajax

Ajax is a set of web development techniques using many web technologies on the client side to create asynchronous web applications. With Ajax, web applications can send and retrieve data from a server asynchronously (in the background) without interfering with the display and behaviour of the existing page. By decoupling the data interchange layer from the presentation layer, Ajax allows web pages and, by extension, web applications, to change content dynamically without the need to reload the entire page.

XAMPP

Xampp is a free and open-source cross-platform web server solution stack package developed by Apache Friends, [2] consisting mainly of the Apache HTTP Server, MariaDB database, and interpreters for scripts written in the PHP and Perl programming languages. [3][4] Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server possible.

MySQL

MySQL is the most popular Open Source Relational SQL Database Management System. MySQL is one of the best RDBMS being used for developing various webbased software applications. It is a very powerful program in its own right. It handles a large subset of the functionality of the most expensive and powerful databasepackages. MySQL uses a standard form of the well-known SQL data language. MySQL works on many operating systems and with many languages including Php, PERL, C, C++, JAVA etc.

PHP

PHP is a recursive acronym for "PHP: Hypertext Preprocessor". The PHP Hypertext Preprocessor (PHP) is a programming language that allows web developers to create dynamic content that interacts with databases. PHP is basically used for developing web based software applications. It is a server side scripting language that is embedded in HTML. It is used to manage dynamic content, databases, session tracking, even build entire e-commerce sites. It is integrated with a number of popular databases, including MySQL, PostgreSQL, Oracle, Sybase, Informix, and Microsoft SQL Server. PHP is pleasingly zippy in its execution, especially when compiled as an Apache module on the Unix side.

FPDF tool

FPDF is a PHP class which allows generating PDF files with PHP code. It is free to use and it does not require any API keys. FPDF stands for Free PDF. It means that any kind of modification can be done in PDF files.

ASP.NET

ASP.NET is a web development platform, which provides a programming model, a comprehensive software infrastructure and various services required to build up robust web applications for PC, as well as mobile devices.

C#

C# is a modern, general-purpose programming language that can be used to perform a wide range of tasks and objectives that span over a variety of professions. C# is primarily used on the Windows .NET framework, although it can be applied to an open source platform. This highly versatile programming language is an object-oriented programming language (OOP)

SQL Server Management Studio

SQL Server Management Studio (SSMS) is an integrated environment for managing any SQL infrastructure, from SQL Server to Azure SQL Database. SSMS provides tools to configure, monitor, and administer instances of SQL Server and databases.

SQL SERVER

SQL Server is a relational database management system, or RDBMS, developed and marketed by Microsoft.Similar to other RDBMS software, SQL Server is built on top of <u>SQL</u>, a standard programming language for interacting with relational databases.

Project timeline/Project diary

My reflections/ experiences of internship

My Internship at NIC porvorim has been a wonderful and growing experience. Facing newer challenges every day is a norm here at NIC. An un-dying hunger to learn more is something that is cultivated in employees here. Being in industry and working on live projects is not something one learns but experiences. At NIC, I was never restricted to just my project team. I was provided freedom to interact, consult seek help and guidance, etc. from any colleague.