

Registrar and Controlling Officer IT

Navsari Agricultural University, Navsari-396450(Gujarat)

Bid Document

"Development and Deployment of custom web based applications with 2 years AMC support" at NAU.

[NAU/REG/IT/04-2021-22]

Table of contents

Chapter	Title	Page No.
1	Bid Notice - NAU/REG/IT/04-2021-22	03
2	Guidelines and Terms & conditions	04
3	Bidder Information	07
4	Technical Bid Documents (Mandatory Documents)	08
5	EMD, SD and Submission Address	09
6	Specification, Requirement and Scope of work for procurement	10

Chapter 1: Bid Notice - NAU/REG/IT/04-2021-22

"Development and Deployment of custom web based applications with 2 years AMC support" at NAU, Navsari. [NAU/REG/IT/04-2021-22]

Department of Information Technology which is working under office of the Registrar is having role of providing various services for automation in university's administration functions. Department of Information Technology is seeking to procure, develop and deploy "Development and Deployment of custom web based applications with 2 years AMC support" for effective management of Administrative Operations at NAU, Navsari.

Sr. No	Web based application details which are required to develop
1.	E-Market Portal
2.	AEMS-Agricultural Experiment Monitoring System
3.	Krishi KIOSK 2.0 Portal

Period of Bid	09/09/2021 to 30/09/2021 18.00 Hrs.
The Last date for online BID submission	30/09/2021 18.00 Hrs.
Last date for submission of EMD and other mandatory documents by RPAD/Courier/Speed post	05/10/2021 up to 18:00 Hrs.
Pre Bid Meeting	18/09/2021 10:00 Hrs.
Earnest Money Deposit (EMD)	Rs. 21000/-
Security Deposit	5% of purchase order
Bid Validity	65 Days
Technical document available on	www.nau.in
Bid submission/Communication address	Registrar and Controlling Officer (IT) Navsari Agricultural University, University Bhavan, Eru Char Rasta, Navsari –396 450 (Gujarat). E-mail: itcell@nau.in Phone No.: 02637 282771-75 Mobile No: 9662532863

The detail requirements, specifications of procurement and Bid document will be published on website www.nau.in under tender section. If any future updates /corrigendum regarding Bid will be there, it will be only published in website www.nau.in / https://gem.gov.in/ during Bid period. Bidder may check www.nau.in / https://gem.gov.in/ regularly during Bid period. Bidder can participate in this Bid through https://gem.gov.in/ only.

Registrar and Controlling Officer (IT)
NAU, Navsari

Chapter 2: Guidelines and Terms & conditions

1.	Cont	ents of the Bid document & Clarification of Bid document
	1.1	The parties are expected to examine all instructions, forms, terms and requirements in the Bid document. Failure to furnish all information required by the Bid document or submission of a bid not substantially responsive to the Bid document in every respect will be at the party's risk and may result in the rejection of the bid.
	1.2	A prospective party requiring any clarification on the Bid document may clear their doubt in Pre-Bid Meetings only. If any bidder is not attending this meeting is considered that he is well aware with requirements of this Bid. In future bidder can't claim that they were not aware about pre-bid meeting discussions. Pre bid meeting is at IT Server Room of ASPEE Agribusiness Management Institute, Navsari Agricultural University, Eru Char Rasta, Navsari—396450 (Gujarat).
	1.3	If Bidder is giving wrong information on forms/specification will be
		black listed for the period of 5 years.
2.	-	ndment of Bid document
	2.1	At any time prior to the last date for receipt of bids, the Purchaser, may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective party, modify the Bid document by an amendment.
	2.2	The amendment will be notified through website (www.nau.in / https://gem.gov.in/ to all prospective parties. So all the bidders are requested to regularly visit the Navsari Agricultural University website and GEM Portal.
	2.3	In order to afford prospective parties reasonable time in which to take the amendment into account in preparing their bids, the Purchaser may, at its discretion, extend the last date for the receipt of Bids.
	2.4	On Scrutiny of Bid document if any queries raised by the committee have to be replied satisfactorily with all documentary proofs within specific time period.
3.	Bid P	rices
	3.1	The bidders should have to quote the prices in Indian Rupees for the each including installation, configuring, commissioning, labour, transportation and all taxes charges. Prices quoted must be firm and final and shall remain constant throughout the bid validity period of the contract and shall not be subject to any upward modifications, whatsoever.
	3.2	Price bid of those Bid will be only opened whose technical bid is accepted.
	3.3	Any kind of travel expenditures of man power for installation and configuration will not be given by Navsari Agricultural University.
	3.4	The Conditional Rate will not be approved and Bidder will be disqualified.
4.	Work	completion, Installation, configuration and AMC
	4.1	Selected bidder must have to complete development of Software/Modules/Portal within 5 month after receiving purchase

		order.
	4.2	Selected bidder must have to provide 2 year free AMC support after
		issuing completion certificate.
	4.3	Selected bidder must have to provide Video Tutorial/On form
		help/User manual documents/PPT and complete service support
		including customization in procured specifications with training
		during development & free AMC period.
	4.4	Selected bidder will be solely responsible for backup of database and
		Software/Modules/Portal source code during development and free
		AMC period.
	4.5	Software/Modules/Portal must be compatible with Linux based
	4.6	server OS and Windows server OS.
	4.6	Selected bidder must have to provide any kind of Installation and
		configuration support for procured Software/Modules/Portal on
	6.7	Linux/Windows server.
	6.7	Software/Modules/Portal must have data import and export facility
	6.8	using Excel File. Software/Modules/Portal must have Role and user wise permission
	0.8	management.
	6.9	Software/Modules/Portal are required to support English/Gujarati
	0.5	font.
	6.10	Software/Modules/Portal must have logs for each and every activity
		of user.
	6.11	Software/Modules/Portal are required to develop in open source
		technologies.
	6.12	The proposed Software/Modules/Portal must include database and
		application connection & communication of required data with other
		developed Software/Modules/Portal.
	6.13	The selected bidder will be solely responsible for any copyright
		infringement issues for developed Portal except any Data provided
	C 1 1	by NAU.
	6.14	Software/Modules/Portal are required to configure with SMS getaway
	6 1 5	& email sending integration.
	6.15	If Selected Party/Bidder is not the developer of the any Application Software/Modules/Portal which are given access to you and if you
		are not developer of that softwares/portals then performance
		guarantee must be provided.
	6.16	In addition if Selected party/bidder sells & saves respected
	0.20	Application Software/Modules/Portal without consent of Developing
		Party then the Selected party for procured modules will be held
		responsible and Original developer can claim the Ownership of
		Software/Modules/Portal if they want.
	6.17	The selected bidder is required to submit original source code after
		final completion of work.
5.		tion of Bidders
	5.1	Selection of bidders will be done on the basis of eligibility and overall
		grand total lowest price obtained in the Bid.
6.		umentation
	6.1	Bidder must follow the required GEM Portal formats while
1		participating in the Bid provide in GEM portal.

7.	Billin	g details and Terms of Payment	
	7.1	The selected bidder must have to submit GST bill only.	
	7.2	The Bidder should specially note that the full payment will be only	
		done after final completion of work and issuance of completion	
		certificate.	
	7.3	During development & AMC Period expenditures of man power,	
		lodging, boarding, traveling and other any kind of expanses will not	
		give by Navsari Agricultural University.	
	7.4	As per the government norms Income Tax and GST will be deducted from paid bill amount as applicable.	
8.	Taxe	es and Other Charges	
	8.1	The successful bidder shall be entirely responsible for all taxes,	
		duties, license fees, demurrage charges and other hidden charges, in	
		respect of this contract and provisions of Income tax Act regarding	
		deduction of tax at source shall apply.	
9.	Right		
	9.1	Right is reserved to accept or reject any or all Bid without assigning	
	0.0	any reasons thereof to NAU.	
	9.2	Selected Bidder must have to submit original source code to NAU.	
	9.3	NAU reserves the right to postpone the date of opening of Bid or to	
		cancel the Bid notice without assigning any reasons thereof. Any	
		request from prospective bidder to postpone or to change date of	
		opening of the Bid due to any reason, whatsoever, will not be considered.	
10.	Cond	itions for "Development and Deployment of custom web	
10.		d applications with 2 years AMC support"	
	10.1	Successful bidder must carry out Development of	
		Software/Modules/Portal as per the University Requirements Only.	
	10.2	The selected party/bidder must provide complete service support	
		including minor customization, API integration/development support	
		& bug fixing in existing structure and training support as per the	
		university requirements during development & AMC Period.	
11.	Visit		
	11.1	Successful bidder must have to provide 1 (one) onsite programmer	
		during development period.	
	11.1	During free AMC period No extra/hidden charges will be paid.	
	11.2	The selected party is required to provide 24*7 onsite/Offsite Support	
12	whenever it is required during development & AMC Period.		
12	12.1	Ity charges In any case bidder will be failed to provide satisfaction in any of the	
	12.1	above Terms & Conditions then bidder will lose security deposit and	
		other necessary actions will be take place like selected bidder will be	
		blacklisted by NAU and bidder has to pay back total paid amount	
		with 10% penalty charges.	
	<u> </u>	with all the above said of Bid terms and conditions	

We agreed with all the above said of Bid terms and conditions.

Signature of Bidder (With Stamp, Name & Designation)

Chapter 3: Bidder Information

1. Name of supplier/firm	:
2. Company Registration No.	:
3. Complete postal address	:
4. Telephone/Mobile Number	:
5. FAX Number (if any)	:
6. E-mail address (if any)	:
7. GST No.	:
8. PAN No.	:
9. Any other details	:
We agree to abide by the term document.	ns and conditions of supply mentioned in this Bid

Signature of Bidder (With Stamp, Name & Designation)

Chapter 4: Technical Bid Documents (Mandatory Documents)

Name of the bidder:

Sr. No.	Check List Documents	Submitted Yes/No	Page No.
1	EMD: Demand draft of Rs. 21000/- (Refundable). (Mandatory)		
2	Valid Registration Certificate of bidders firm. (Mandatory)		
3	Signed Copy of Chapter 2: Guidelines and Terms & conditions. (Mandatory)		
4	Signed Copy of Chapter 3: Bidder Information. (Mandatory)		
5	2 Years Income Tax Return for the Assessment Year 2019-20 & 2020-21. (Mandatory)		
6	Original affidavit from the bidder that business entity is not blacked listed. (notarized on Rs. 300 stamp paper) (Mandatory)		
7	2 years past Experience Of Similar Services (Mandatory)		

DECLARATION

I/We solemnly declare that we have attached all the documents mentioned here above and mentioned in the Bid. It is verified that all the certificates/permissions/documents are valid and current as on date and have not been withdrawn/cancelled by the issuing authority. I/We further undertake to produce on demand the original certificate/permission/ document for verification at any stage during the processing of the Bid. I/We also understand that non-compliance of any documents will be treated as non-respective Bid and we will lose our claim to participate in the Bid Enquiry automatically and our Bid will be liable to reject.

Signature of Bidder
(With Stamp, Name & Designation)

Chapter 5: EMD, SD and Submission Address

Earnest Money Deposit: Bid shall be accompanied by an earnest money, without which Bids will not be considered. The amount of **EMD Rs. 21,000/**-should be deposited in the form of Nationalized or Scheduled Bank Draft in favor of "Account Officer (Cash) NAU, Navsari, payable at Navsari.

Refund of earnest money: The earnest money of unsuccessful Bidder will be refunded. The Earnest Money Deposit of successful Bidder will also be refunded after completion of purchase procedure.

Forfeiture of earnest money: The earnest money will be forfeited in the following cases:

- When Bidder withdraws or modifies the offer after opening of Bid.
- When the Bidder does not deposit the security money after the work/purchase order is given.

Security Deposit: Successful bidder shall deposit security/performance guarantee money (5% of purchase/work order) in the form of Bank Draft in favor of "Account Officer (Cash) NAU, Navsari, payable at Navsari or Performance Bank Guarantee (25% of purchase/work order).

Refund of Security Deposit: The amount of security deposit will be refunded after 1 year from the issuance of completion certificate.

Forfeiture of Security Deposit: The security deposit will be forfeited in the following cases:

- When works/services are not successfully executed as per requirement mentioned in the Bid document.
- When successful bidder terminate the works/services in during execution period.
- When any issue raised in quality or services during warranty period

EMD and Bid Submission Address:

Registrar and Controlling Officer (IT)

Navsari Agricultural University, University Bhavan, Eru Char Rasta, Navsari –396 450 (Guiarat).

E-mail: itcell@nau.in

Phone No.: 02637 282771-75

Mobile No: 9662532863

Chapter 6: Specification, Requirement and Scope of work for procurement

"Development and Deployment of custom web based applications with 2 years AMC support" at NAU.

Item No.	Item Specification "Development and Deployment of custom web based applications with 2 years AMC support"
1	E-Market Portal

Scope of work

The scope of the project is to design and develop the Multi farmer (sellers) and buyer's portal to connect them via same platform with attractive and visually appealing design complete Functionality.

This scope of work defined in the document is the main requirements and common features that comes in portal. The final requirements of the project will be shred time to time after the project is started. The features are subject to change in terms of adding new features and removing any features that are not needed based on the requirements.

Modules Included:

- Seller (Farmer)
- Buyer
- Administrator

E-commerce Features:

UNIQUE FEATURES:

- Easy To Use
- Integrated SEO
- Turn-Key Solution
- Unlimited Listing Types
- Fully-Automated
- Email Management
- 100% Customizable
- Payment Processing

Multi-Seller:

- Each seller has a separate seller profile page & can edit their profile page on their
- Seller can add banner, logo custom HTML text and also customize store as per any colour theme.
- Feedback and review system with interactive star rating.
- Separate seller's product collection.
- Admin can verify products from the sellers and allow them to list on the portal.
- Seller can do custom shipping.
- Provision to Automatic approval of products and partners setting in the admin side.
- Admin can restrict the account menu options and sequence.
- The admin can assign specific product categories to sellers.
- The sellers can add tax information from the front-end.

• It should support Multi-Lingual feature.

Optional features that should be implemented based on requirements by NAU at any time

- Online payment and online order tracking
- Admin can select the order status for the seller. Only selected order status will be used by the seller for changing their product order status.
- The admin can assign specific product categories to sellers.
- The admin can pay to all sellers at once using Mass Pay-out if online payment option is integrated.
- Customers can view the estimated date of the delivery on the product page.
- Admin can create template-based emails for Marketplace which will be used, according to Admin selection.
- It supports Multi-Lingual feature.
- Admin/Seller can change order status of each product.
- Admin/Seller can enter tracking number for each product.
- The customer can check out with multiple seller's product at the same time.
- Journal Theme Compatible

USER PANEL:

- Login
- Forgot password
- Registration
- Search
- Manage Profile
- SMS details Email log details
- News Feeds
- Products
- Live Chat
- All-in-one platform
- Notifications
- Login Credentials
- Post business advertisement
- In-built CMS
- Feature Rich Admin Panel
- Customized Admin panel
- Creates business directory websites
- Manage (content pages, email template, photo property)
- Easy to install, manage, upgrade and support
- Complete business directory eye catching template & easy to use
- Easy News Publication System
- Personal my account details with history.
- Get Email Options.
- Get SMS Options.
- Search option enabled.
- User Wallet available.
- · Payment Gateway enabled.
- Check status
- Coupon codes.
- · Promotions codes.
- Wallet offers credits.
- Refer

Admin PANEL

- Admin can manage product categories, sub categories, type of products etc
- Admin can able to add images to the banner slideshow
- Admin can able to view/edit the images in the banner slideshow
- Admin can able to delete the images in the banner slideshow
- Send SMS & Email to all users at once
- Manage user accounts

FRONT END - SEARCH

- Basic and Advance search option
- Search result page with listing all matched entries with navigation
- After select any one of the list , goes to the Entry detailed page
- Display the Entry detail page

NEWSLETTER MANAGEMENT

NEWSLETTER - USER FUNCTIONALITY

- Subscribe module for user subscription
- Subscriber email extended validation
- Subscription acknowledgment for email confirmation
- Activate the subscriber using email activation.
- User Unsubscribe option, when the user no need to receive the newsletter

NEWSLETTER - ADMIN FUNCTIONALITY

- · Creating Newsletter using Html Editor
- Sending bulk newsletter in Batch wise (to avoid the spam)
- Newsletter Template Creation, we can use the template at any time for sending the newsletter
- Synchronize the user from the registered User, means convert the registered user into Newsletter subscriber in single click
- Import / Export the subscribed Users
- Block the user to avoid receiving newsletter

FAQ (ADMIN AND USER FUNCTIONALITY)

- Admin can view all the FAQ's
- Admin can Add any number of FAQ's
- Admin can Edit / Delete the existing FAQ's
- Admin can published / Unpublished the existing FAQ's
- Admin can change the order of existing FAQ's display in the frontend
- FAQ's base support Images
- User can view all the list of FAQs
- FAQ's support the Accordion Effects in the frontend

SEO FRIENDLY URL (ADMIN AND USER FUNCTIONALITY)

- Generate SAFE URLs
- Advanced SAFE URL management
- Generate and manage metadata (component based)
- Sitemap generation
- Keywords management
- Duplicates management
- Multilingualism support and URL localization
- UTF-8 URLs support
- URL caching
- Editing access capability
- URL variables filtering option prevent URL code injections! With custom filter definitions

- URL source tracing to help allocate problematic code
- 301 Redirections management
- 404 Page Not Found customization

General Implementations and requirements

- Integration with NAU SSO portal
- Integration with NAU CMU portal
- Integration with NAU Analytics system
- Delivered product must be compatible with NAU's Ubuntu servers
- Developer must need to deploy their source code to NAU's Dedicated GIT server each and every time when code changes and must deploy to the live environment from GIT repository only.
- CSRF protection
- SQL Injection protection
- OWASP top 10 implementation
- No data should be permanently deleted from the system
- Log of each user activity. And history of each record should be tracked.

AEMS-Agricultural Experiment Monitoring System

Scope of work

2

The scope of the project is to design and develop the portal which tracks the ongoing experiments by NAU Agricultural scientists and generate reports based on provided data.

This scope of work defined in the document is the main requirements and common features that comes in portal. The final requirements of the project will be shred time to time after the project is started. The features are subject to change in terms of adding new features and removing any features that are not needed based on the requirements.

Modules Included:

- Scientists
- Units
- Authorities
- Administrator

Agricultural Experiment Monitoring Features:

Unit Features:

- Add new experiment
- Allocate Project In-charge for the experiment
- Allocate co-PI for the experiment
- Link portal with the NAU Website and NAU-ERP system to get the various data about project like AGRESCO details, Budget head details, Employees details etc.

Scientist Features:

- Login Via SSO portal to scientist account
- Check their allotted experiments
- Record day to day activities and operations details in the respected experiment
- Upload proof of operation done
- Separate management to manage RAW data of the experiment
- Yearly tracking of the experiment and operations data.
- Separate implementation if the operation tracking for the basic sciences department.

Authorities Features:

- Login via SSO portal to moderator's account.
- Track all the activities done by the scientist for the particular experiment.
- Generate various reports including annual books, budget head details reports, income and expenses reports which are integrated into the NAU URP system.

Administrator Features:

- Role wise menu permission
- Crop management
- Crop categories management
- Unit management
- Experiment management
- Various rights based on the special roles

FRONT END - SEARCH

- Basic and Advance search option
- Search result page with listing all matched entries with navigation
- After select any one of the list, goes to the Entry detailed page
- Display the Entry detail page

NEWSLETTER MANAGEMENT

NEWSLETTER - USER FUNCTIONALITY

- Subscribe module for user subscription
- Subscriber email extended validation
- Subscription acknowledgment for email confirmation
- Activate the subscriber using email activation.
- User Unsubscribe option, when the user no need to receive the newsletter

NEWSLETTER - ADMIN FUNCTIONALITY

- Creating Newsletter using Html Editor
- Sending bulk newsletter in Batch wise (to avoid the spam)
- Newsletter Template Creation, we can use the template at any time for sending the newsletter
- Synchronize the user from the registered User, means convert the registered user into Newsletter subscriber in single click
- Import / Export the subscribed Users
- Block the user to avoid receiving newsletter

FAQ (ADMIN AND USER FUNCTIONALITY)

- Admin can view all the FAQ's
- Admin can Add any number of FAQ's
- Admin can Edit / Delete the existing FAQ's
- Admin can published / Unpublished the existing FAQ's
- Admin can change the order of existing FAQ's display in the frontend
- FAQ's base support Images
- User can view all the list of FAOs
- FAQ's support the Accordion Effects in the frontend

SEO FRIENDLY URL (ADMIN AND USER FUNCTIONALITY)

- Generate SAFE URLs
- Advanced SAFE URL management
- Generate and manage metadata (component based)
- Sitemap generation
- Keywords management
- Duplicates management

- Multilingualism support and URL localization
- UTF-8 URLs support
- URL caching
- Editing access capability
- URL variables filtering option prevent URL code injections! With custom filter definitions
- URL source tracing to help allocate problematic code
- 301 Redirections management
- 404 Page Not Found customization

General Implementations and requirements

- Integration with NAU SSO portal
- Integration with NAU CMU portal
- Integration with NAU Analytics system
- Integration with NAU URP system to fetch the various details needed in experiment and reports.
- Delivered product must be compatible with NAU's Ubuntu servers
- Developer must need to deploy their source code to NAU's Dedicated GIT server each and every time when code changes and must deploy to the live environment from GIT repository only.
- CSRF protection
- SQL Injection protection
- OWASP top 10 implementation
- No data should be permanently deleted from the system Log of each user activity. And history of each record should be tracked.

Krishi KIOSK 2.0 Portal

Scope of work

3

The scope of the project is to design and develop the KIOSK portal to ensure that information dissemination to Grass Root Level especially to the remote Villages is made easy through Digital and online Kiosks, the proposed Multifunctional Kiosk Software and Web Dashboard is expected to have the following features embedded in it.

This scope of work defined in the document is the main requirements and common features that comes in portal. The final requirements of the project will be shred time to time after the project is started. The features are subject to change in terms of adding new features and removing any features that are not needed based on the requirements.

Modules Included:

- Administrator
- KIOSK Manager

KIOSK Features: UNIQUE FEATURES:

- Easy To Use
- Integrated SEO
- Turn-Key Solution
- Unlimited KISOK Types
- Fully-Automated
- Email Management

100% Customizable

The kiosk should be dynamic so that administrator can add as many kiosks as they want and assign KIOSK manager to manage that kiosk. Each dynamically created KIOSK should have following features by default which can be enabled or disabled based on requirement by the KIOSK MANAGER

KIOSK information:

- For what the KIOSK is
- Type of KIOSK and kiosk Categories
- Based on the kiosk categories kiosk manager can add the kiosk information
- Agri Market Intelligence

Weather forecasting.

- To provide weather updates to farmers regarding the rainfall, temperature etc.
- Integration with NAU-Website and NAU-meteorology department's hardware devices based on requirements.

Video Calling Facility

- To ensure that farmers gain valuable knowledge / suggestions from Agri Scientists it is proposed to make available Video calling facility in Kiosks. The respective District Resource Centres and Integrated Call Centre to be connected with Kiosks during Video call.
- This feature is required to be integrated with NAU-Video Streaming Software which is a portal to stream live videos and video conferences.

News

• News must be visible to farmers through the Multifunctional KIOSK application. News can be multilingual.

Advertisement to generate revenue

 The proposed multifunctional KIOSK application must also include Advts provision as per requirement in the Multifunctional Kiosk software. The Advts publication, timings, content etc are to be managed from the Dashboard

Banners

• The proposed multifunctional KIOSK application must allow four banners at the top to display Dept programme. The Banner images to be controlled and updated through Dashboard.

Text to Voice Feature

• The software application should allow Text to Voice feature with screen reader access.

NEWSLETTER MANAGEMENT

NEWSLETTER - USER FUNCTIONALITY

- Subscribe module for user subscription
- Subscriber email extended validation
- Subscription acknowledgment for email confirmation
- Activate the subscriber using email activation.
- User Unsubscribe option, when the user no need to receive the newsletter

NEWSLETTER - ADMIN FUNCTIONALITY

- Creating Newsletter using Html Editor
- Sending bulk newsletter in Batch wise (to avoid the spam)
- Newsletter Template Creation, we can use the template at any time for sending the newsletter

- Synchronize the user from the registered User, means convert the registered user into Newsletter subscriber in single click
- Import / Export the subscribed Users
- · Block the user to avoid receiving newsletter

FAQ (ADMIN AND USER FUNCTIONALITY)

- · Admin can view all the FAQ's
- Admin can Add any number of FAQ's
- Admin can Edit / Delete the existing FAQ's
- Admin can published / Unpublished the existing FAQ's
- Admin can change the order of existing FAQ's display in the frontend
- FAQ's base support Images
- User can view all the list of FAQs
- FAO's support the Accordion Effects in the frontend

SEO FRIENDLY URL (ADMIN AND USER FUNCTIONALITY)

- Generate SAFE URLs
- Advanced SAFE URL management
- Generate and manage metadata (component based)
- Sitemap generation
- Keywords management
- Duplicates management
- Multilingualism support and URL localization
- UTF-8 URLs support
- URL caching
- Editing access capability
- URL variables filtering option prevent URL code injections! With custom filter definitions
- URL source tracing to help allocate problematic code
- 301 Redirections management
- 404 Page Not Found customization

General Implementations and requirements

- Developed portal must support multilingual feature
- Integration with NAU SSO portal
- Integration with NAU CMU portal
- Integration with NAU Analytics system
- Delivered product must be compatible with NAU's Ubuntu servers
- Developer must need to deploy their source code to NAU's Dedicated GIT server each and every time when code changes and must deploy to the live environment from GIT repository only.
- CSRF protection
- SQL Injection protection
- OWASP top 10 implementation
- No data should be permanently deleted from the system Log of each user activity. And history of each record should be tracked.

Note: All the above mentioned software must be developed as per the customized requirements received from the IT Department and the concerned departments of NAU and scope of work only.

Signature of Bidder

(With Stamp, Name & Designation)