Development of New Website for State Lotteries Department

To build a robust online presence, the Kerala State Lotteries Department plans to integrate an effective digital marketing/online PR framework into our website. The website will be a database-driven portal providing users with seamless and dynamic experience. It will feature an interactive chat-bot backed by a database engine. An administrator will have secure login access to modify content/meta-data stored in the database. This updated information will be fetched from the database and displayed to visitors, while also being accessible to search and social media bots to maintain up-to-date information.

The official website will adhere to the Guidelines of Indian Government Websites (Version 2.0) and be available in English and Malayalam. Content development in both languages will undergo proper plagiarism checks before publishing. The default layout of the webpage should be in Malayalam. SSL certificate procurement, GUI standardization and customization should be done.

The website will feature modern design elements, intuitive navigation, and social media integration. It will have functionalities like Google location maps, contact forms, and password-protected pages. A user-friendly Content Management System (CMS) will enable easy content management by administrators. Post-development testing, adherence to government website guidelines, and dynamic features for updates and web accessibility should be ensured.

The website will be responsive across all devices and feature provisions for RSS/Atom feeds, XML sitemaps and article schema/RDFa code. It will prioritize search engine visibility, localization, and user-centric content. Real-time feed integration with social media platforms and Google Knowledge Graph integration will be implemented to enhance reach and engagement. The website will focus on providing relevant content ensuring a seamless user experience.

To achieve these goals, the website redesign will focus on modernizing its design, adopting responsive web design, and implementing the latest technologies. Search engine optimization (SEO) will be enhanced and a personal-driven content strategy will be developed. Advanced technologies like machine learning and artificial intelligence will be leveraged to improve user experience. The content of the site must be manageable from anywhere exclusively by the site administrators. This console will be fully secure, restricting unauthorized access by allotting unique usernames and encrypted passwords. The website could be extensive with a database management and content management system to make it user-friendly, interactive, informative, and constantly updated.

Continuous monitoring and analytics will ensure ongoing optimization and performance improvement.

Ensure that the webpages are accessible to people with disabilities by implementing features such as alternative text for images, keyboard navigation support and compatibility with screen readers. Additionally, consider providing adjustable font sizes and colour contrast options to accommodate individuals with visual impairments. Incorporate semantic HTML mark up and ARIA attributes to enhance accessibility for screen reader users.

Security Audits and Penetration Testing

To enhance security measures, the website will undergo security audits and penetration testing. This includes obtaining "Safe to Host Certification" from CERT-In empanelled security auditing agencies, as referenced in G.O(MS) No. 8/2019/ITD dated 22-04-2019 & G.O.(Ms) No. 44/2021/ITD dated 22/12/2021. Additionally, the website will be hosted in the Kerala State Data Centre.

The successful bidder will provide training (face-to-face or through online mode) to the required number of staffs of Kerala State Lotteries, for updating, managing and administrating the website, along with commissioning and an Annual Maintenance Contract (AMC) for three years. A Service Level Agreement (SLA) and ongoing support will also be ensured.

The successful bidder will conduct all types of post-development testing such as beta testing, load testing, user acceptance testing, functionality testing, etc.

Website Layout:

1. Homepage:
   ● Introduction to the website's purpose and categories.
   ● Highlight key features and facilities available.
   ● Quick access links to main sections.
   ● The index page/home and sub page design layout should be static in nature so as to maintain the aesthetic approach done towards the promotion of the website.
   ● Managing colours (maximum three or four colours)
   ● Managing fonts (up to five fonts may be used).
   ● Maintaining the colour pattern of the State Lottery Department Logo is recommended.

- Accessibility Menu.
- include lottery department logo and mascot.

2. General Public Section:
- Access to publications, brochures, and latest lottery results of Kerala State Lotteries in PDF format.
- Information on government orders, circulars, proceedings and guidelines.
- "Ask the Expert" (chat bot) feature and feedback submission form.
- Online career/job application facility
- Media scan, including video, photo and poster galleries.
- Live telecast provision for events or conferences and Live draws.
- Lottery details, draw calendar, Draw Results and FAQ section.
- Download Menu for old lottery draw results, application forms,Prize Structures, Claim procedures etc.

3. Footer:
- Contact information.
- Social media links for easy sharing.
- Include Department Mobile App link
- Terms of use and privacy policy links.
- Copyright information.
- Other website links related to the department (for eg: Agent Portal,)

This layout organizes the website's content according to the different user categories while providing easy access to the various features and facilities offered. It ensures that visitors can quickly find the information they need based on their interests.

Social Media Integration

The website should have good social media integration using Open Graph, Social Media Schemas, and widgets. The website shall be provided with content sharing, option to social networking in a collaborative mode. The social media links will be placed conveniently in the website based on the page design.

Encourage social sharing of lottery information, winners' stories and promotional campaigns. This will increase brand awareness and drive more traffic to the website.

Facilities and Services:

- **Tender/Quotation/EOI Management**: Develop a system for managing tender, quotation, and expression of interest processes, including submission, evaluation, and notification functionalities.
- **RTI Act and Information Officer Details**: Provide information on the Right to Information Act and details of designated information officers.
- **Vigilance Officer Details**: Include information about vigilance officers and their roles.
- **Kerala State Lotteries Details**: Provide comprehensive details about Kerala State Lotteries, including department information, staff details, mission, vision, etc.
- **Visitors Counter**: Implement a visitor's counter to track website traffic.
- **Testimonials**: Showcase user testimonials to build credibility.
- **Random Image Banners**: Display random images or banners to enhance visual appeal. The images must be free of all copyright restrictions
- **Location Map**: Include a location map for easy navigation.

Digital Marketing/Online PR Framework:

- **Improvements to Index Infrastructure**: Enhance the index structure for better accuracy and relevance.
- **Google Listing as Featured Snippets**: Optimize content to appear as featured snippets in Google search results.
- **Crackdown on Black Hat SEO Tactics:** Implement measures to prevent keyword stuffing and other black hat SEO techniques.
- **LSI Index Explanation**: Utilize Latent Semantic Indexing or similar mechanisms to improve index understanding.
- **Integration of Traditional Results**: Integrate traditional search results with news, videos, images, and local listings.
- **Single-Word Search Results for KSL**: Optimize search results for single-word queries related to Kerala State Lotteries.
- **Real-Time Feed Integration**: Integrate real-time feeds from Twitter, Google News, etc., and convert Facebook posts into news feeds for wider reach.
- **Google Knowledge Graph Integration**: Integrate with Google Knowledge Graph for enhanced visibility.
- **YouTube Integration**: Include trending videos, latest uploads, and most viewed videos through API and manual methods.
- **Emphasis on Recent Content**: Prioritize recent content in search results.
- **Localization of Results**: Ensure localized results for relevant queries.
- **Featured Snippets with Facts and Images**: Include relevant facts and images alongside traditional search results.

- **Recognition of Full Question Searches**: Optimize for full question searches and emphasize high-quality content through Web Ontology Integration Provision (OWL).
- **BERT Integration:** Implement BERT (Bidirectional Encoder Representations from Transformers) for question answering, abstract summarization, sentence prediction, and conversational response generation in search results.
- **Make KSL site PR ready**: Methods to eliminate non-conformities existing in the website, based on Digital Marketing or Online PR.
- **Identifying Canonical Issues:** Method to avoid content canonical issues.

Technical Attributes

1. Redesign and Modernize the Website:

- Collaborate with designers to create a visually appealing and brand-aligned website layout.
- Implement intuitive navigation and a user-friendly interface for seamless browsing.

2. Adopt Responsive Web Design:

- Utilize responsive design techniques to ensure the website adapts to various screen sizes and devices.
- To cater to the growing number of mobile users, ensure that the website is responsive and mobile-friendly. This will provide a seamless browsing experience across different devices and improve accessibility. The design should be responsible for easy reading and navigation with a minimum of resizing, panning, and scrolling across a wide range of devices, including mobile devices. Additionally, there should be a provision to dynamically remove expired content from the primary screen.

3. Implement Latest Technologies:
- Incorporate HTML5, CSS3, and JavaScript libraries to enhance website functionality and interactivity.
- Consider frameworks like React or Angular for smoother user experiences.

4. Search Engine Optimization (SEO):

- Optimize content with relevant keywords and proper meta tags.
- Implement structured data markup for improved search engine visibility.
- Address performance issues identified in the audit for better ranking.
- dynamic XML sitemap creation.

- Implement schema markup, microdata, and other structured data to enhance search engine visibility and improve SERP rankings.

5. Persona-driven Content Strategy:

- Conduct thorough research on target audience personas to tailor content accordingly.
- Develop informative articles, lottery tips, and interactive elements to engage visitors.

6. Integration of Latest Technologies:

- Utilize machine learning and AI for personalized recommendations and real-time updates.
- Implement chatbots for customer support to enhance user experience.

7. Enhance Website Performance:

- Optimize code, compress images, and leverage caching techniques for faster load times.

8. User-centric Features and Tools:

- Introduce ticket purchase tracking, lottery result notifications, and interactive games.
- Enhance user engagement and provide unique experiences.

9. Seamless Integration with Social Media Platforms :
- Integrate social media sharing options and encourage user interaction.
- Leverage social media for promotional campaigns and brand awareness.

10. Regular Content Updates and Blogging:

- Maintain an active blog section with fresh and engaging content related to lotteries.
- Encourage repeat visits by providing valuable information and updates.

11. Robust Security Measures:

- Implement SSL certificates and encryption protocols.
- Ensure user data protection and maintain the integrity of the lottery system.

12. Continuous Monitoring and Analytics:

- Implement web analytics tools to monitor performance and user behaviour.
- Analyse data regularly to make data-driven decisions for further optimization.

Non-Technical Attributes:

- **Terms and Conditions**: Define terms and conditions governing the website usage.
- **Privacy Policy:** Outline the website's privacy policy to ensure user data protection.
- **Cookies Policy:** Provide information on the use of cookies and user consent mechanisms.

Additionally, addresses technical attributes such as metadata integration, broken link management, and schema markup. Regularly update these technical aspects to stay aligned with best practices and algorithm changes.

To enhance the Kerala State Lotteries Department website's digital marketing and online public relations, several significant improvements are necessary. These enhancements will improve search engine visibility, user experience, and technical performance, ultimately leading to a better online presence and increased engagement. As part of the redesign process, the official website of the state lotteries department, **www.statelottery.kerala.gov.in** requires a revamp.