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| Title | Software or Web Developing Senior Specialist |
| Vacancy Number | MoPW/SRTAP/PSC/1400-65 |
| Ministry | Ministry of Public Works |
| Organization | Program for Service life enhancement and construction cost reduction of roads (PSC) |
| Project | Sustainable Reform & Technical Assistance Project |
| Duty Station | Kabul |
| Duration | 1 year |
| No of Jobs | 1 |
| Nationality | Afghan |
| Sex | Male/Female |
| Salary Range | NTA Salary Scale (Grade B1 - B3) |
| Announcing Date | 22 May 2021 |
| Closing Date | 03 June 2021 |
| Job Type | Engineering & Technology |
| Shift | Full Time |
| Job Status | Sourcing |
| Experience | 8+ years of relevant experience |

**Background:**

The Ministry of Public Works (MoPW) is responsible for the planning, design, procurement, implementation, monitoring, and maintenance of the various transportation infrastructure projects such as roads, bridges, and its relevant drainage and retaining/protection structures in the government of the Islamic Republic of Afghanistan.

On a mission to reduce project costs and extend the service life of road infrastructures in Afghanistan, the MoPW aims to embark on an initiative to ***develop a web-based application/tool for bitumen grade selection*** that would be accessible by the user through a web browser with an active network connection. The application will allow pavement engineers to select the most suitable, cost-effective, and less restrictive penetration grade of bitumen for a particular site based on the MoPW standards. The grade selection will primarily depend upon the levels of traffic loading and speed on the site, actual high and low pavement/air temperatures, and regional climatic conditions. The use of such an application will ensure the delivery of quality, cost-effective, reliable, safe, and durable asphalt road projects in Afghanistan. The developed web app will be primarily owned/administered by the MoPW and made available for online users.

The functioning manner of the web app will be such that the user would simply enter the essential

input parameters: coordinates of the location, low and high annual air temperatures, traffic loading in ESAL, and design traffic speed. Automatic adjustments of penetration grade (grade changing) for traffic and temperature variations would take place and the calculated penetration grade will be displayed.

The ministry intends to form a team of highly experienced experts with diverse affiliations and extensive partnerships with industry and government organizations that will closely collaborate to accomplish the above goal effectively and within the specified timeframe.

**Scope of Work/Job Summary:**

The MoPW intends to engage a professional *Full-Stack Web App Developer* with proven experience in website and web application development focused on the front and back-ends of a web app development as well as designing, coding, and modifying web sites/applications.

The incumbent will work under the direct supervision, guidance, and direction of the International SME and leadership of the Team Leader/ Project Manager and will be responsible for IT duties involved in the application development and programming, as well as coding. The position holder must understand the web app appearance, its intended purpose, and requirements and will closely collaborate with the web designer to make sure that the developed app contains the necessary information and that all of the content is clear, visible, and found in the right place.

The selected candidate will remain active through all phases of the web application development and work alongside the team and in close coordination with senior management in the MoPW. The role must directly report to the Project Manager/Team Leader.

**Duties & Responsibilities:**

The responsibilities of the *Full-Stack Web App Developer* will include but not be limited to:

- Work in close collaboration with team members to achieve the shared objective of designing a sophisticated web application for the selection of bitumen penetration grade;
- Discuss the requirements from the application with team members and senior management;
- Take the designer's concepts and create the code for the intended web application;
- Write well designed, testable, efficient web application codes by using the best software development practices;
- Assist the web designer in creating the web application layout/user interfaces by using programming languages such as HTML/CSS/JavaScript practices and integrating the targeted data;
- Assist the designer in creating a visually appealing web application that features user-friendly design and clear navigation;
- Work with team members to determine what information the application will contain;
- Ensure that all outbound links are correctly formatted and that all buttons work properly;
- Ensure that the developed app functions smoothly by performing the quality analysis and testing in various internet browsers, different operating systems (cross-platform), and all different devices, like laptops, smartphones, and tablets;
- Perform troubleshooting and debugging;
- Determine the look and feel of the web application and present the final quality product to the users;
- Show the ability to code and process traffic/climate data to predict future scenarios;
- Assist the team to incorporate meteorological and temperature contour maps into the web application;
- Oversee the process of web application development and ensure the quality;

- Ensure that the final product works precisely displaying outputs without any technical/engineering faults and is approved by the senior management for use;
- Analyze and resolve technical issues and propose optimum solutions promptly; and
- Undertake other tasks related to the design/development of the application either required or assigned by the senior management.

**Skills & Competencies:**

- Adequate knowledge of Object-Oriented Programming and web application development;
- Hands-on experience with network diagnostics, network analytics tools;
- Basic knowledge of Search Engine Optimization process;
- A solid understanding of how web applications work and know best development practices;
- Demonstrate top-notch programming skills and in-depth knowledge of modern HTML/CSS;
- Familiarity with at least one of the following programming languages: PHP, ASP.NET, Javascript, or Ruby on Rails;
- Able to update the web app content based on the requirements and changes in the source code;
- Demonstrate experience of working in collaborative coding environments with multiple team members;
- Experience with server management;
- Having a basic understanding of pavement materials, and their performance correlation with traffic and climate variations is desirable;
- Fluency in spoken and written English language and excellent communication skills;
- Able to coordinate with co-workers and meet deadlines;
- Experienced in troubleshooting electronic or communications equipment;
- Able to manage conflicting priorities; and
- Demonstrate leadership in handling and working with multidisciplinary teams.

**Job Requirements:**

- An undergraduate degree holder in Computer engineering, software engineering, Computer Languages, or any other related field with specialization in designing, developing, and maintaining websites/applications;
- Having at least **8 years** of proven working experience in web programming within reputable organizations mainly focused on the development and maintenance of web and/or network applications for various engineering purposes;
- Acquaintance with various data management/analysis and statistical analysis software/programs is desirable;
- A Candidate with a proven employment record in a similar role within the regional/international organizations is highly preferred;
- Proven organizational and problem-solving skills;
- Excellent verbal and written presentation skills;
- Team player.

**Required Documents:**

- CV with a cover letter for the relevant position;
- Copy of verified Degree by the Ministry of Higher Education;
- Copy of verified Afghan ID Card (Tazkera) or Passport;
- Copy of verified last Posting Contract; and

- Copy of other relevant documents that support the application.

## Submission Guideline:

Interested candidates are requested to forward their applications, detailed CV and other required documents to **jobs.mopw@yahoo.com** indicate the vacancy number (**MoPW/SRTAP/PSC/1400-65**) and the post title **(Software or Web Developing Senior Specialist**) in the subject line when applying by email to the Human Resource Unit – Sustainable Reform and Technical Assistance Project of Ministry of Public Works (MoPW) at Kabul, Afghanistan.

**Address:** SRTAP Office, Railway Building, Kabul-Jalalabad Rd., opposite KMTC, MoPW, Kabul, Afghanistan.

Note: Only short-listed candidates will be contacted.