<div align="center">

Terms of Reference
for
Development of Database Software for Job Placement

Consultancy

</div>

A. Introduction

The Underprivileged Children's Educational Program (UCEP) Bangladesh is a leading national NGO that provides better livelihood opportunities to poor urban working children through General Education, Skills Training and Job Placement support in close collaboration with large, medium and small industries and workshops throughout Bangladesh. Its objective is to raise the socioeconomic condition of urban and peri-urban underprivileged children and their families, to enable them to participate effectively in national development and thus enhance their capacities through acquisition of knowledge and skills and fulfilment of their basic rights.

At present UCEP has an enrolment of over 46,000 children in its 44 General Schools, 10 Technical schools and 2 outreach centers in Dhaka, Chittagong, Khulna, Rajshahi, Barisal, Sylhet, Rangpur, Gazipur, Bogra and Sherpur. The Technical Schools of UCEP operate 35 trade courses corresponding to the demand of employment markets. Besides, UCEP also operates SSC Voc courses through its five technical schools. UCEP is acknowledged as a leader and innovator of educational and training approaches and is recognized nationally and internationally as a center of excellence of human resource development. The success of UCEP programs make it unique in the TVET sector of Bangladesh.

B. Background

UCEP has more than 45 years' experience and expertise of developing and implementing education programs focusing on skills and employability of underprivileged children and youths. One of the challenges of UCEP is to institutionalize its programs and maintain a proper database of all successful students of skills training and Job Placement programs. These challenges could be addressed through establishing a database and recording all the graduates' placement information in industry and the status of those who are taking vocational skills training from UCEP Technical Schools and placed in different industries.

International Labour Organization (ILO) has given priority to promoting skills training and employment support to underprivileged youths in the country. UCEP is now implementing an inclusive skills training program on selected trades in priority sectors in collaboration with ILO's B-SEP project. As a long-term strategic partner, ILO's B-SEP project wishes to support UCEP to develop a Job Placement Database Software for UCEP to maintain records of its students, their employment status as well as employers' information.

C. Objectives of the Consultancy

The objective of the consultancy is to develop web based software to maintain records of students' who are undertaking vocational skills training from UCEP and are placed in different industries.

D. Overview of the proposed system

The proposed software will provide an online platform to connect UCEP graduates and the employers and facilitate job placement. The UCEP job placement cell will be able to track the job placement progress through this software. UCEP graduates will be able to create and update their profile in the system, search and apply for suitable jobs, get notification on matching jobs, and/or inquire employers regarding jobs. The employers will be able to post jobs, search for suitable candidates in the database, sort list and interview the candidates and offer job to the candidates through this system. The employers will also be able to post their future demand for specific skills set. The UCEP management will be able to facilitate matching the skills set with the demand

<div align="center">

1

</div>

set by the employers, track the progress of job placement and plan future trainings based on skills demand. Activities to be performed by different groups via the proposed system are shown below:

Employers:

- Register to the system
- Can post jobs
- Can search potential graduate
- Can send invites to potential graduates
- Can sort and interview/assess potential graduates
- Can match available skill sets with required skills sets
- Can submit skills requirements (by trades/areas/year etc)

Graduates:

- Can post their profile
- Can search for jobs and employers
- Can inquire the potential employers
- Can apply to a posted job
- Can update, view, download and print own CV
- Can subscribe to notifications for matching jobs

UCEP management:

- Can view reports on employers, graduates, placement and skills sets
- Can configure the system
- Can create facilities, branches
- Can approve graduate and employer registrations
- Can mass mail graduates and employers
- Can manage users, roles and access
- Can import/export bulk data via Excel/CSV
- Can manage contents of the site by adding/editing categories and pages
- Can manage contents like notices, news, photo gallery, slide shows, etc

Following will be the technical features of the software:
- The software will be web based, responsive and browser & device independent
- LAMP platform will be used for the application. Therefore, the software must be developed using latest version of PHP (with Laravel framework) and MySQL.
- The system will be able to send email & mobile SMS notification and this should be configurable
- Users, Roles and Access management will be integrated part of the software
- The system will be able to enforce all data validation during entry and at time intervals
- The system will be able to show instructions on maps using Google map or other online mapping services
- The system should have a content management system (CMS) from where news, articles, categories, photo, career guidance materials, etc can be added and updated
- The software source code, must have sufficient comment and be delivered without encryption
- Developer must provide user manual/tutorial with screenshots
- Developer must provide detailed development documentation (work flow diagram, data flow diagram, etc.)

E. Scope of Work

The consulting firm will work closely with the BSEP project and UCEP to elicit requirements and manage the software development life cycle including capacity building and knowledge transfer. In particular the scope of the work will be as follows:

1. **<u>Gather requirements and develop user stories/use cases</u>**: In discussion with ILO-BSEP and UCEP, gather details of the requirements and develop user stories; prepare a software requirements specifications (SRS) and get signed off by ILO BSEP. A tentative requirements and expected features of the software are listed in Annex 1.

2. **Develop and test the web-based application**: Based on the requirements gathered, develop an application framework that includes user management, access control, security and workflow for publishing information. This application framework should be able to add modules in future and be able to share data with other applications. Test the application framework with the real users from UCEP and gather feedback on the system.

3. **Finalize the web-based application**: Based on the feedback received from the testing by the real users, finalize the web based application and prepare technical documentations and user manuals for orienting the users.

4. **Orient the users and UCEP staff**: Orient the system administrators and end users of UCEP (approx. 30-35 persons) on administering and using the system. Finalize the users' manual based on feedback received from the end users. Make the user manual as help file to online application so that user can refer to the manual as and when needed.

5. **Hand over the software**: Host the online software at UCEP designated web server and hand over the documented source code, user manuals and training materials to UCEP with a plan of regular maintenance.

6. **Provide troubleshooting support**: Provide troubleshooting support for at least 6 months after handing over the software. The support should be in person, over telephone and via email, as and when necessary.

At the end of the assignment, the UCEP will have a fully functional web-based application and UCEP staff will be able to maintain the software.

F. Expected Deliverables

The contractor will deliver the following as part of this assignment:
(1) Inception Report with updated project plan;
(2) Software developed and delivered as per technical requirements stated in the scope of work and agreed through SRS;
(3) Conducted orientation training for UCEP's Job Placement team
(4) Conducted software maintenance training for UCEP IT Staff (one working day)
(5) Delivered final version of the Software along with documented source code;
(6) Delivered user's manual and training materials.

G. Vendor Responsibilities

For this consultancy, the vendor will be responsible for the followings:

- Managing the software development team
- Attending the meeting, workshops, discussions with UCEP and ILO as and when needed;
- Submitting the specified deliverables to ILO and UCEP for comments and approval
- Delivering Software using as per scope of work and signed-off SRS
- Organizing and conducting trainings of master trainers and users
- Supporting UCEP in troubleshooting during the piloting and after handing over of the software

H. ILO's responsibilities

Being the sponsor of the project, ILO will be responsible for the followings:

- Liaison with UCEP and involving them in the process
- Assisting in setting meetings and workshops with the UCEP
- Provide technical feedback on the process, documentation and deliverables
- Review the Software and providing feedback to finalize
- Getting nominations for the master trainer and user trainings from UCEP
- Releasing the payments upon satisfactory delivery by the vendor

I. Timeframe

The contractor will submit detail time frame for completing the assignment in light of the following tentative timeframe for the milestones.

Milestone No.	Task/Output	Deadline / Time
1	Inception Report with SRS	Within 2 working weeks after starting the assignment.
2	Software developed and delivered using as per technical requirements stated in the scope of work and agreed in SRS	Within 5 working weeks after starting the assignment, must be agreed and signed off by UCEP and ILO
3	Conducted orientation training for UCEP's IT and Job Placement team	Within 6 working weeks after starting the assignment orientation training will be organized and conducted by the consultant in consultation with UCEP and ILO
4	Delivered refined final version of the Software along with documented source code, users manuals and training materials	Within 8 working weeks the consultant will deliver the refined final software

J. Financial proposal

The financial proposal by the firm should contain itemized cost, at least for the following broader deliverables: System analysis and requirements gathering cost; software development and testing cost; orientation training for UCEP's IT team and Job placement team; and post-handover troubleshooting support cost.

K. Proposed Payment Schedule:

The Payments are made upon satisfactory completion and acceptance by the ILO for the deliverables:

- 10% of the contract value upon submission of Inception Report and SRS (milestone 1)
- 50% of the contract value upon submission of Software developed as per technical requirements stated in the scope of work and SRS (milestone 2)
- 20% of the contract value upon submission of the user manuals, training materials and completion of training of UCEP's IT and Job Placement team (milestone 3)
- 20% of the contract value upon submission of the refined Final Version of the Software along with documented source code, final user manuals and training materials (milestone 4)

L. *Reporting Arrangements*

The contractor will work under the overall guidance of the Director of ILO Country Office and direct supervision of the "Bangladesh Skills for Employment and Productivity" Project's Chief Technical Advisor and will report to the BSEP-Component 1 Specialist. As the assignment will be time constrained, the consultancy firm will provide weekly update on the progress during the assignment.

M. Minimum Qualification & Experience Required

The vendor with experience in Linux-Apache-MySQL-PHP (LAMP) application development may bid for this assignment. The team should consist of the following members at the minimum:

Role	Responsibilities	Qualification
Project Manager	Responsible for managing the software development project, liaison with ILO and UCEP gather requirements; report on progress of development	Masters in ICT/CSE/MIS; at least 3 years' experience in managing software projects
Web Application Developer	Develops the database structure and application framework using suitable open source software based on requirements gathered; develops appropriate	At least 2 years' experience in LAMP application development; and experience of developing web applications with Laravel PHP framework
Technical Trainer	Develops user manual, training materials; delivers training to UCEP's IT and Job placement team	At least 2 years' experience in technical writing and training delivery

In addition to the above, the firm should fulfill the following criteria:
- Legal establishment for a minimum of three years (proven document. e.g trade license, VAT registration)
- Experience in similar assignments with proven track record
- Should have capacity to provide post-deployment support for at least 6 (six) months.

N. Submission of proposals

The ILO invites technical and financial proposals from eligible software companies to implement the assignment. The proposals should include detailed methodology, detailed work plan, a cover letter/ motivation letter explaining why they are the most suitable for this assignment, and a detailed budget. A Purchase Order will be awarded based on the quality of technical and financial proposals following the ILO procurement and financial rules and regulations. Payment will be made in Bangladeshi Taka (BDT) as per the ILO financial rules and payment conditions as stipulated in the service Agreement/ Purchase Order and ToRs.

The interested companies are requested to submit their proposals hardcopy to the address: Mr. Kishore Kumar Singh, Chief Technical Advisor, B-SEP Project, IDB Bhaban, Ground Floor, E/8-A, Begum Rokeya Sharani, Sher-e-Bangla Nagar, Agargaon, Dhaka by CoB on 10 July 2017.

***