**Project summary**

Enhancement of Bangla Language in ICT through Research & Development

**At glance:**

**Sponsoring Ministry/Division :** Information & Communication Technology Division/ministry of posts, Telecommunication and Information Technology.

**Executing Agency:** Bangladesh computer Council ( BCC )

**Project cost :** 159.02 tk

**Funds:** GOB

**Project implementation period :** july,2016- june,2019

**Project goal:** To enrich Bangla Language at international level/standard with help of ICT to make the country as Digital Bangladesh.

The main objective of the projects is:

1. Establish Bangla in computing as a leading language at the global platform through ICT.
2. Standardization of various features of Bangla language for use in ICT.
3. Developing Tools, Technologies and contents for Bangla computing.
4. Conduct studies,survey and research to enhance Bangla language based computing through innovation and modernization of Bangla ICT.

**Scope:**

1. 16 tools development for Bangla language will create opportunity for the people to use Bangla at international level.
2. Standardization of Bangla corpus,font,CLDR,IPA font etc, will enable world class Bangla computing.

**CONSLTANT:**

|  |  |  |
| --- | --- | --- |
| **Description** | **Salary(per month)** | **Qualification** |
| Bangla Language Technology specialist | 300000.00 tk | -Graduate in any subject and higher degree  - 7 years of research experience and 3 numbers of research publication |
| ICT Specialist | 300000.00 tk | -Bachelor in CS/Engineering/ICT  -15 Years’ experience and 5 years software development experience |
| Procurement Specialist | 150000.00 tk | -Bsc. Engineering or Masters in Economics/statistics/Finance/Management/law  -6 years of experience in relevant field. |
| Manager | 120000.00 tk | -Bachelor in CS/Engineering/ICT  - 10 Years of experience in relevant field |
| Team Leader | 100000.00 tk | - Bachelor in CS/Engineering/ICT  - 5 years of experience in relevant field |
| Project Associate | 70000.00 tk | - Bachelor in CS/Engineering/ICT  - 2 years of experience and 1 year relevant field experience. |

**16 tools and workshop/seminar cost list:**

|  |  |  |
| --- | --- | --- |
| Tools name | Tools development cost(tk) | Workshop/seminar (lacks) |
| 1.Development of complete Bangla corpus. | 5,703.63 | 16.98 |
| 2.Further improvement of Bangla OCR developed by ICTD & integrating hand writing recognition system | 1,329.24 | 16.98 |
| 3.Development of Bangla speech to text & text to speech software | 778.36 | 16.98 |
| 4.Improvement of the national keyboard ( Bangla | 652.73 | 16.98 |
| 5.Development of Bangla style guide | 158.35 | 11.32 |
| 6.Development of the Bangla font interoperability Engine | 255.46 | 11.32 |
| 7.Development of Bangla CLDR resource and submit to Unicode | 342.82 | 11.32 |
| 8.Development of bangla spell & Grammar checker | 699.06 | 16.98 |
| 9.Development of the bangla machine translator( BMT ). | 1247.46 | 16.98 |
| 10.Development of screen reader software | 185.65 | 11.32 |
| 11.Development of software for disable people | 981.81 | 16.98 |
| 12.Development of sentiment analysis software in bangla | 1306.87 | 11.32 |
| 13.Developing a service platform.  Translation of most popular/used sites into international language | 159.29 | 16.98 |
| 14. Translation of most popular/used sites into international language | 345.70 | 11.32 |
| 15.Standard keyboard for Tribal Languages | 2.91 | 16.98 |
| 16.Incorporating Bengali IPA fonts and software to world language linguistic list | 684.75 | 11.32 |
| Total | 14834.10 | 232.06 |

**Time schedule of 16 software and workshop tenders:**

|  |  |  |
| --- | --- | --- |
| Tools name | INVATION FOR EOI | ISSUE OF RFP |
| 1.Development of complete Bangla corpus. | FEB,17 | MAR,17 |
| 2.Further improvement of Bangla OCR developed by ICTD & integrating hand writing recognition system | FEB,17 | MAR,17 |
| 3.Development of Bangla speech to text & text to speech software | FEB,17 | MAR,17 |
| 4.Improvement of the national keyboard ( Bangla | FEB,17 | MAR,17 |
| 5.Development of Bangla style guide | MAR,17 | APR,17 |
| 6.Development of the Bangla font interoperability Engine | MAR,17 | APR,17 |
| 7.Development of Bangla CLDR resource and submit to Unicode | MAR,17 | APR,17 |
| 8.Development of bangla spell & Grammar checker | MAR,17 | APR,17 |
| 9.Development of the banglamachine translator( BMT ). | MAR,17 | APR,17 |
| 10.Development of screen reader software | APR,17 | MAY,17 |
| 11.Development of software for disable people | APR,17 | MAY,17 |
| 12.Development of sentiment analysis software in bangla | APR,17 | MAY,17 |
| 13.Developing a service platform.  Translation of most popular/used sites into international language | APR,17 | MAY,17 |
| 14. Translation of most popular/used sites into international language | APR,17 | MAY,17 |
| 15.Standard keyboard for Tribal Languages | MAY,17 | JUNE,17 |
| 16.Incorporating Bengali IPA fonts and software to world language linguistic list | MAY,17 | JUNE,17 |
| Total | MAY,17 | JUNE,17 |

**The 4 goals linkages with SDGs are :**

**G1.** Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

**G2.** Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

**G3.** Build resilient infrastructure,promote inclusive and sustainable industrialization and foster innovation.

**G4.** Reduce inequality within and among countries.

Bangla is the seventh most spoken language in the world. Enhancement of Bangla language in ICT is mainly focus to build up some ICT tools to case the tasks of using Bangla in ICT through research & development.