Expression of Interest for Virtual Lab Platform Development and implementation of Experiments

VLEAD, IIIT Hyderabad

June 27, 2017

1 Background

Virtual Labs Engineering Architecture and Design (VLEAD) of International Institute of Information Technology Hyderabad’s (IIITH) is part of a nationwide effort to build Virtual Labs, a growing repository of web based simulation experiments in various disciplines of science and engineering geared towards college students.

There are currently around 150 labs and 1500 experiments under Virtual Labs at various stages of development and deployment. These are hosted at https://vlabs.ac.in. Their current usage is around 2 million.

The usage of Virtual Labs is free. All content of Virtual Labs is licensed under Creative Commons-Non Commercial-ShareAlike 3.0. Virtual Labs software — experiments, platform and services — is licensed under GNU AFFERO GENERAL PUBLIC LICENSE, Version 3(AGPL-3.0)

Virtual Labs is funded by Ministry of Human Resources Development, India.

2 Objective of EoI

The objective of this invitation for Expression of Interest (EoI) is to identify interested parties to partner with the Virtual Labs project — and VLEAD IIITH specifically — to enhance the virtual labs in terms of their quality, usability and scale.
3 Scope of work

3.1 Deliverables

The vendor will deliver the following within six months of the order.

1. Scalable and secure micro-services based architecture for virtual labs.
2. Virtual Labs authoring services and studio for content and experiment development. UI framework and guidelines.
3. Experiment runtime environment for UI, analytics, persistence, experiment state.
4. Reference implementation of thirty existing vlabs experiments using the above architecture and services.

3.2 Methodology and process

- Vendor team will jointly work with VLEAD at IIITH premises and follow VLEAD best practices.
- Vendor will use open source technologies for development.
- Vendors will follow open source development technologies, processes and practices, including test driven development, literate programming and version control.
- Vendor’s solutions will work with existing VLEAD services and platforms (for some details, see http://dev.vlabs.ac.in).

4 Response to EoI

4.1 Address

Please arrange to email a soft copy of the response to tenders@vlabs.ac.in and a hard copy to the following address:

Director
(Attn: VLEAD, Virtual Labs, Software Engg. Research Centre
Sub: Response to EoI on Virtual Labs)
International Institute of Information Technology
Prof. C R Rao Road
Gachibowli, Hyderabad 500 032
4.2 Deadline

The deadline for receipt of the soft copy response is Thu, 6th July 2017, 1700hrs IST. The hard copy of the response document should be sent by registered post postmarked by this date.

4.3 Content

Your response should include the following:

1. Profile of company
   
   (a) History of company:
   (b) Financial strength: financial data (Revenue, P&L and balance sheet) for last 3 years.
   (c) Professional strength: no. of employees, offices
   (d) Technical strength: scale of solutions, technologies, processes and practices.
   (e) Business strength: examples of similar work and important clients.
   (f) Typical profiles of the people who will work on this project.
   (g) Experience in development of open source s/w.

2. A write-up that addresses your approach to each item in the scope of work including the requirements, methodology and process.

5 Evaluation process

1. An IIITH constituted committee will evaluate the responses to this EoI and invite suitable bidders for a presentation.

2. Based on the recommendations of the evaluation committee, a suitable set of bidders will be selected.

3. These selected bidders will then be requested to submit a detailed technical and financial bid based on a Request for Proposals provided by IIITH.

4. The set of final vendors will be selected after a round of presentations and evaluation of their respective technical and financial proposals.