*The legend of **Ekalavya**, the great self-taught archer, from Indian mythology serves as a symbol for many of us. The story is not just about perfecting one's skills on one's own. It also encapsulates dreams of highest achievements, total commitment to a cause, and above all, the importance of hard and focussed work.*

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What is Project ekalavya?

Today, in several parts of India, students, teachers and professionals often struggle with the pace of the fast developing technology. Though talented, they lack resources, experience and exposure, and their skills are inadequate. They are capable of producing excellent work but lack competent guidance. These students are like the **'Ekalavya'** of Indian mythology who wished to perfect his talent but did not have a 'Guru' to lead the way.

Project **ekalavya** is an endeavour to provide an interactive platform for the creation, absorption, dissemination and usage of knowledge for the well being of the individual and the society.   It is an **Open Source Knowledge Initiative** launched by the Affordable Solutions Laboratory (ASL), Kanwal Rekhi School of Information Technology (KReSIT), **IIT Bombay**. The project attempts to bridge the gap between the seekers and givers of knowledge by creating innovative channels of communication. It takes the legendary figure of Ekalavya as a symbol for this activity, representing the human quest for excellence and knowledge.

The web portal set up for **ekalavya** aims at a free exchange of knowledge and ideas, by placing all the relevant material in the **Open Source**, thus making considerable contribution to the society. It aspires to build large collaborative communities the seekers are matched by the givers. It is envisaged that **Project ekalavya** will become an all-encompassing activity over the years, using IT effectively for education at all levels. The project hopes to realize this goal through a series of schemes/ programmes, each fulfilling a specific objective.

The portal **http://ekalavya.it.iitb.ac.in/** developed in-house in the Affordable Solutions Lab provides automation for coordination of the programmes. Some of the main functionalities provided at the portal are: communication channels between all the participants of the programmes (discussion forums, mail, news, announcements),

schedule management, monitoring of programmes, management of the central repository of documents, code and other details related to projects, administrative management and personalized web pages with various guidelines, and references.

Project ekalavya has been supported by the industry in the form of participation and contributions. Amongst the notable industry partners who have provided direct support are EMC, Infosys, Intel, PSPL, Red Hat, TCS, and VIA Technologies. Professional associations, such as, CSI and NASSCOM have also indicated their interest for support and participation. DGF and TIFAC are also providing direct support to Project **ekalavya**.

What are the different programmes under Project ekalavya?

Project ekalavya is manifested in several programmes, such as, **eGURU**, **eOUTREACH** and **eCONTENT.**

- The **eGURU** programme is based upon the traditional Indian concept of Guru-Shishya. It is designed to provide e-guidance and mentorship to needy students of **B.E., M.C.A.** and **M.Sc. (CS/ IT/ Electronics)** programmes, in carrying out their final year projects and encouraging them to think of innovative technical solutions to various real life problems. IIT Bombay will be partnering with several companies to provide incentive awards for significant contributions. For example, the Red Hat Scholarship in partnership with Red Hat, selects the best projects for a monetary prize entitled **'Lord of the Code**.' The scholarship is designed to encourage young talent and the spread of Open Source philosophy.

- The **eOUTREACH** programme creates a bank of high quality Open Source contents. These include digital audio/ video and text contents of specialized lectures and workshops for the benefit of students, teachers and professionals. Such contents, along with other Open Source software and documentation created or collected under this programme, are made available for distribution at cost through the Web and digital media. The **OSCAR** (Open Source Courseware Animations Repository) scheme under the **eOUTREACH** programme creates a large repository of interactive animations for teaching various concepts and technologies. This can be used through affordable dissemination for classroom teaching as well as for enabling

independent learning and distance education. An auxiliary goal of OSCAR is to provide training opportunities to students, involving the creation of an animation for a particular concept, as well as the management and maintenance of the animations in the repository.

- Much of the rich content on the Web is not available today to large Indian communities. The **eCONTENT** programme has been designed to create Open Source digital contents in Indian languages through translation and new writings, mainly on topics of relevance to education at all levels.

What is the eGURU Programme?

The main objective of the **eGURU** programme is to benefit those final year students of **B.E., M.C.A.** and **M.Sc. (CS/ IT/ Electronics),** who find it difficult to carry out a major component of their curriculum, namely the project, due to the paucity of resources and mentors.

The **eGURU** programme provides the **students** with a list of relevant and challenging projects, which encourage them to think of innovative technical solutions to various real life problems. More importantly, it attempts to provide them with mentors who guide them in their final year projects, encouraging them to work on relevant topics. The mission of the **eGURU** programme is to increase the quality of the students' project work through focussed guidance and mentoring.

The **mentors** are qualified experts in specific research areas. They are volunteering faculty, research scholars and industry professionals, willing to spend two to three hours a week, on advising these students on specific topics/ areas of their interest and expertise.

Successfully completed projects under **eGURU** are released in the **Open Source**. This enables the students to get acquainted with the Open Source philosophy, and more importantly, to make contributions to the growth of the common pool of knowledge in the Open Source. All activities in the **eGURU** programme are done online, viz., submission of project proposal, mentoring and submission of the finished project. Therefore, the students can work on the projects from their own colleges.

How does the eGURU Programme work?

- Bonafide students of final year B.E., M.C.A. and M.Sc. (CS/IT) from Indian colleges can register **online** in the **eGURU** programme. The participants are permitted to form a small group of a maximum of **FIVE** students to work on these projects. Preliminary registration normally takes place between mid-December and mid-March every year. Final registration closes in June.

- A group can either submit an original project proposal or choose one from the pool of available project ideas. Once the project proposal is accepted, the group may be provided with a mentor, if there is one available, who will guide them through the execution of the project. The date of the final project submission is set as per the academic calendar of the colleges.

- Volunteer experts from the industry and the academia provide their observations of the submitted projects. The final evaluation is carried out in the respective colleges as per the academic requirements of the affiliating university.

- Each college, from which students will be participating in the **eGURU** programme, needs to appoint a faculty member as a coordinator to take care of the evaluations.

Who can participate in the programme?

- **Students**: Students interested in carrying out their final year **B.E., M.C.A.** and **M.Sc. (CS/ IT/ Electronics)** project are eligible to participate and register for **eGURU**.

- **Expert Volunteers:** Faculty members, research scholars or Industry professionals, who are willing to devote two hours a week of their free time are welcome to register as expert volunteers.

- **Educational Institutions:** Some institutions are unable to provide adequate and experienced faculty to guide the talented students studying in their colleges. **eGURU** helps such institutions to solve this problem by providing their students with online guidance and mentoring. However, each participating institution will be required to appoint a faculty member as academic coordinator for the project work.

- **Industry:** The industry is not only a source for expert volunteers, but also provide ideas for project proposals. They provide challenges in the form of real

life problems to the students, encouraging them to come up with viable and innovative solutions. The industry, in turn, gains easy access to young talent, as well as to usable Open Source software.

Registration for the **eGURU** programme is open for projects to be carried out during the next academic year. It is on a first-come-first-serve basis, is subject to eligibility, and is available only through the internet.

Students, teachers and professionals, interested in benefitting from or contributing to Project **ekalavya** (or both), are invited to visit **http://ekalavya.it.iitb.ac.in/** for further details.

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