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Government of India
Ministry of Human Resource Development
(Department of School Education & Literacy)
(School-5 Section)

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Shastri Bhawan, New Delhi,
Dated: 15th January, 2015.

To,

1. The Principal Secretary/Secretary of School Education of all States/UTs.
2. The State Project Director of RMSA of all States/UTs.

Subject:- School Books/e-Books available on e-basta portal.

Sir/Madam,

As you are aware, Government of India has been actively pursuing the idea of e-books to facilitate learning. In line with this movement, Department of Electronics and Information Technology has prepared an online portal to enable schools to browse and compile electronic resources on various educational materials. Apart from locating relevant resources based on tags (language, class, subject, etc), one can organise them meaningfully in a hierarchy based on one's preference. User download statistics, and ratings by users provide additional information in selecting good quality resources. Such organised resources can be downloaded by students for use on their tablets and similar devices.

E-basta (Portal-URL: www.ebasta.in) is a valuable framework in enabling schools to reach out to high quality, multimedia content, and at the same time resolve logistic difficulties of handling physical books and resources. The portal is free for use and has been developed by the centre for Development of Advanced Computing (C-DAC). Resources on the portal may be free or priced, and user will be charged for priced resources upon download. The E-basta can be made to suit the prescribed books/resources of schools as per the syllabus of their School Board or school specific requirements. A brief writeup on the system is enclosed.



e-Basta

Browse, Compile, Download

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CDAC

From school books to eBooks



Background

In line with the government's digital India initiative, this project has created a framework to make the school books accessible in digital form as e-books which can be read and used on tablets and laptops. The main idea is to bring the various publishers – free as well as commercial – and the schools together on one platform. In addition to the portal, a structure to facilitate organization and easy management of such resources has also been made, along with an app that can be installed on the tablet for navigating such a structure.

The eBasta Framework

The framework, implemented as a portal, brings together three classes of stakeholders: the publisher, the schools, and the students, and provides them the following primary functionalities.

Publisher: Upload e-content along with metadata covering class, language, subject, price, preview pages, etc. Pre-publication content can also be uploaded for review; these will not be available for download. Publishers can also view comments and ratings produced by the users of the portal, as well as download-statistics of the various e-contents.

School: Schools, usually in the form of some authorized teachers, access the portal to compile resources as per the school's preferences, for each class. They browse the e-contents uploaded by various publishers, search for contents of their liking, and organize them into a hierarchical eBasta. One can create an eBasta from scratch or by modifying another eBasta existing on the portal. Every eBasta has a unique name, which can be given to the students so that they can download the eBasta on their own.

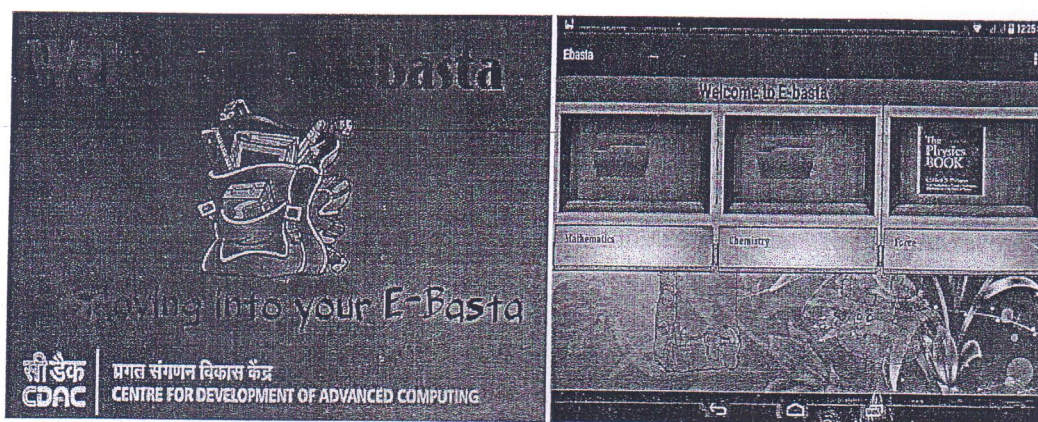
Target Users

- Publishers can publish their e-content on the portal, for use by the schools.
- The schools can browse, select and compile their choice of resources from this pool, as a basta for different classes.
- Students can then download such bastas from the portal, or the school may distribute them through media like SD cards.

Students: Students come to the portal to download a prescribed eBasta or explore eBastas and contents available on the portal, and download those that they need. If the set of contents to be downloaded includes non-free resources, they will be taken to payment portal to complete the payment. Then they will be given access to download the contents. In the case of eBastas, they are expected to use the eBasta app to access the contents.

eBasta App

The eBasta app, downloadable from the portal, runs on any Android tablet. It can access the eBasta created using the portal, and render it for easy navigation by the student. The content considered by the app is as defined by the teacher/school in the eBasta structure, irrespective of what resources are on the SD card or storage. The app can be invoked by clicking the .cbs file associated with an eBasta. The background colour, logo etc can be customised through the portal.



Technologies used

- ✓ The portal has been built by using Drupal CMS version version 7.33. It has been extended to handle eBasta structure and associated functions.
- ✓ The eBasta app has been built a-fresh in Java 7 on Android 5.0 API Level: 21.

Schools

- Teachers can choose and bundle content according to their teaching preferences.
- A rich variety of resources – animations, audio books, videos, etc – to choose from.
- Faster access to updated editions of contents.
- Aid schools with lesser teaching resources to gain from the resources of better schools.

Advantages

Students

- Reduce the burden of physical books.
- Easy access to structured resources created by School.
- Long-term reduction in cost.
- Access to richer resources – animations, audio books, videos, etc
- Access to eBastas of other schools.