

A LIGHT WEIGHT APP TO WORK WITH DISCOURSE.ORG (METASTUDIO.ORG)



 AIM of the project Technical details Results Video tour of mobile app Live Website tour

Future scope

Concluding remarks

Introduction



COOOL STEM GAMES

The COOOL STEM Games or the MetaStudio platform is inspired by project-based learning which is central to Gnowledge lab.



Learning Model

Constructionist and connectionist models of learning carried out by using Activity Based Collaborative Distributive (ABCD) moves.



Game and badges based learning

It is an online platform for discussion and rewards based on the STEM habits and was launched on 15th June, 2019.



Open source learning

It consists of collaborators seeking STEM discussions and hence, mainly concerned with open discussions and posting in threads.



Problems

The major drawback that was raised and complained about was the resource utilisation, heavy bandwidth consumption and the complexity of the website.



AIM Of The Project

Responsive

Adapts to all screen sizes making it cross platform supportive and thus more accessible to users.



Lighter

Uses data and storage parsimoniously in order to shorten loading times. This will allow people from remote areas to access the website and still have the same user experience.

Progressive

Can be viewed offline as read-only because of cached webpages. Allows the app to be installed on all devices irrespective of the Operating System.

Simpler

A clean, intuitive and simple telegram like chat User Interface. Young students are also potential users, so making an easy to interact UI was a must.



Technical Details





Results

- All the tests have been conducted in cache disabled modes.
- As evident from these, the new site is lightweight and cuts down network and storage consumption as compared to main metastudio site by nearly 50%.
- The number of requests per page is very less as compared to the existing version.
- The loading time, resources used and the amount of data transfer on first-load are reduced.
- We also tested our app on 3G, slow 3G and in various simulated conditions and displays, and it turned out to be way faster than the current version of metastudio.org.
- Our app is far ahead of metastudio.org with its minimalistic approach.











Future Scope





Concluding Remarks

PS1 brought new learning opportunities

- This internship has been a unique and interesting experience. We have gained new technical knowledge and skills.
- We got to learn and work in the domain of Web Development. This real-life problem statement and client needs introduced us to the world of software development.
- We got insight into professional practices like working and collaborating in teams on GitHub.
- This also taught us the art of addressing client needs, managing time and setting achievable targets
- Presenting updates and reporting for meetings helped us gain important soft skills which are needed to work in any domain in life.

Working under excellent mentors

- We are grateful to have knowledgeable and helpful mentors who guided us throughout this internship period.
- We would like to express our deepest gratitude and special thanks to Professor Nagarjuna G, who despite being very busy with his duties, guided and kept us on the correct path.
- We also express our deepest thanks to all the industry mentors, namely Surendra Sir, Mahesh Sir and Siddhu Sir for taking part in crucial decisions and for resolving the issues we faced.
- Puneet Kishore sir helped us engineers see the world in a non-technical way. His insights are the reason this app is user friendly. It was a pleasure working with him.

Our Team

 \searrow





Bir Anmol Singh

B.E. Computer Science



Shubham Agarwal B.E. Computer Science



Ananya Khandelwal B.E. Electronics and Instrumentation

f20180417@pilani.bits-pilani.ac.in



Anusha Agarwal B.E. Electrical and Electronics

f20180032@hyderabad.bits-pilani.ac.in \searrow

f20180301@pilani.bits-pilani.ac.in

Science Technology Engineering Arts Mathematics

