



Steel Coding Platform

Muhamed Salih. S. I¹, Kishor. C², Vinod. G³, Arthi Arumugam⁴
 Student^{1, 2, 3}, Associate Professor (Gr II)⁴
 Department of Information Technology
 RMKEC, India

Abstract:

The online based application may be not preferred in some use cases such as local placements selection process, assignments and assessments. Most of them require more cost and high band width network access. We attempted to solve the issue by development of a simple UI and powerful design of backend API call design, thereby dynamic call of the process only need less band width and Its highly event based therefore the call to server is done only raised when the core needed functionality is called. The learning module and practicing platform is developed in highly generic way so that the system can be specialized according to any stream and requirement. It is developed in a form so simple to customize the code and use module in multiple times.

Key words: Education, Online Coding, Learning Modules, Micro Service Architecture.

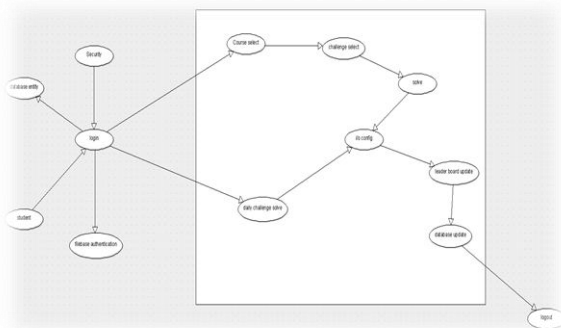
I. INTRODUCTION

Now a day the online platform for learning are increasing some of them have complex structure and some have diverse feature to learn and understand concepts. Among that online learning platform it is hard to find the simple interfaced platform to learn and coding experiment. Those platforms are totally based on online. There are several website available now a days to make learning interesting but sometimes it loses simple interfaces and have more difficult version of the learning module and challenges. The most available platform are online based and can't be customized as per the local need and some require high bandwidth online connection. While some available providing huge variety of feature with high cost and they are not open source in nature

II. OBJECTIVE

The educational site that designed with bare minimum generic components to approach student and learner's to give a ease experience in learning and coding. And the implementation of powerful yet simple API service at background reduce too much traffic in network and respond only for event based AJAX calls and initial call to the server.

III. ARCHITECTURE



Login is implemented with Google Firebase login authenticator so that the authentication is more secure by using token. Challenge Dashboard it is a module containing dynamic course content that is uploaded by the course admin. Learning Module in this module, various course content videos and other links for the selected course are available. Daily Challenge in this module, the question for the code is uploaded in daily basis by the admin for the student to solve. Once it is completed or the time is done the answer for the code cannot be done. Leader board statistics over a period of time for the course module and the daily challenge is updated daily. API and Local Connection Module implementation uses various API's if network is available otherwise can implement local connection for consuming core modules of this application with lower configuration. Logout after all the process is done the user clicks on logout button where all the cookies and sessions are deleted. Micro service architecture, or simply micro services, is a distinctive method of developing software systems that has grown in popularity in recent years. In fact, even though there isn't a whole lot out there on what it is and how to do it, for many developers it has become a preferred way of creating enterprise applications. Thanks to its scalability, this architectural method is considered particularly ideal when you have to enable support for a range of platforms and devices spanning web, mobile, Internet of Things, and wearable's or simply when you're not sure what kind of devices you'll need to support in an increasingly cloudy future.

IV. CONCLUSION

The educational site that designed with bare minimum generic components to approach student and learners to give a ease experience in learning and coding.

V. FUTURE ENHANCEMENTS

This application can be further enhanced by adding more content on various stream and implementation of adaptive learning ML technic to more efficiently monitor and assess the student or user

using the system and provide more powerful report and content according to the user need and learning capacity.

VI. REFERNCES

[1]. Priyadarashani doke, Surabhi Shingote, Sneha Kalbhor, Anumeha Singh, HeenaYeole, ONLINE C, C++, JAVA COMPILER USING CLOUD COMPUTING- A SURVEY, International Journal of Advances in Engineering Science and Technology, Dec 12,2015

[2].M.Pabitha, T.Selvakumar, Punitha Devi An Effective C, C++, PHP, Perl, Ruby, Python Compiler usingCloud Computing International Journal of Computer Applications (0975 – 8887) Volume 69– No.7, May 2013.

[3]. J.Zhang, Y.Wang, Exploration on C Language Programming Teaching Based on Computational Thinking", *Wireless Internet Technology*, pp. 98-102, 2015.