

RESEARCH ARTICLE | SEPTEMBER 05 2023

# Cloud web console (CWC) - A web console framework for connecting multiple cloud databases 🛒

Prasanth Yalla ✉; Lavanya Gottemukkala; Madhavi Karanam

+ Author & Article Information

*AIP Conf. Proc.* 2754, 060002 (2023)

<https://doi.org/10.1063/5.0161767>

It has been many years since cloud databases come into existence. These are very helpful for deploying a web application on a server that can easily connect to the cloud database. But there is a flaw in Forcing the developers using the cloud database for small scale application and large-scale application to download a desktop application to interact with the console to query and interact with the database. The objective of this study is to design a web application which can perform as an online console instead of different desktop cloud database consoles with no installation of an application and less CPU usage and also accessed through multiple devices like laptop, desktop PC, mobile phone, etc., and make it available to use anywhere, anytime by anyone with the help of an URL. As the database instances on the cloud come under IaaS(Infrastructure as a Service) cloud service for them we create a SaaS(Software as a Service) as a solution for the identified problem by allowing the user to select his choice of accessing the database and providing his/her user credentials to connect their database instance and keep on querying unlimitedly. We have developed a solution as a web application and hosted on Heroku which helps developers to run, build, entirely in the cloud. where there is no possibility of a data breach as we are not saving the users credentials anywhere, they are all lost the moment user exits the session, in turn, providing smooth and efficient access of the database easily. Users can get the same output as the console. Hence we

x



[Information technology](#), [Databases](#), [Telecommunications engineering](#)

## REFERENCES

1. Doaa Hassan, Sherif El-Kassas, Ibrahim Ziedan, "Developing a Security Typed Java Servlet", (IEEE, 2008).  
[Google Scholar](#)   [Crossref](#)
2. Fawaz A. Masoud, Dana H. Halabi and Deema H. Halabi, "ASP.NET and JSP Frameworks in Model View Controller Implementation", (IEEE, 2006).  
[Google Scholar](#)
3. J. D. Y. Correa and J. A. B. Ricaurate, "Web Application Development Technologies Using Google Web Toolkit And Google App Engine-Java", (IEEE, 2014).  
[Google Scholar](#)
4. Jin Yuping, "Research and Application of Ajax Technology in Web Development", (IEEE, 2014).  
[Google Scholar](#)   [Crossref](#)
5. Jose Antonio Macias, "Enhancing Interaction Desing on the Semantic Web: A Case Study", (IEEE, 2012).  
[Google Scholar](#)
6. Mingyi Zhang, Patrick Martin, Wendy Powley, Jianjun Chen, "Workload Management in Database Management Systems: A Taxonomy", (IEEE, 2017).  
[Google Scholar](#)
7. Mr. Likhesh Nilkanth Kolhe, Prof. Sachin Bojewar, *IJSRP*, (December 2013).  
[Google Scholar](#)
8. Prakash Gopala Krishnan, B. Uma Maheswari, *IJITEE*, (April 2019).  
[Google Scholar](#)
9. R. R. Echeverria, F. Macias, V. M. Pavon, J. M. Conejero, F. S. Figueroa, "Legacy Web Application Modernization by Generating a REST Service Layer", (IEEE, 2015).  
[Google Scholar](#)   [Crossref](#)



10. S. M. Reza Dibaj, Ali Miri and Seyed Akbar Mostafavi, "A *Cloud Priority-based dynamic online double auction mechanism (PB-DODAM)*", (Springer, 2020).

[Google Scholar](#)

11. Thomas Sandholm and Dongman Lee, *Journal of Cloud Computing: Advances, Systems and Applications*, (Springer, 2014).

[Google Scholar](#)

12. Wei Jiang, Meng Zhang, Bin Zhou, Yujian Jiang, Yingwei Zhang, "Responsive Web Design Mode and Application", (IEEE, 2014).

[Google Scholar](#)   [Crossref](#)

This content is only available via PDF.

©2023 Authors. Published by AIP Publishing.

You do not currently have access to this content.

## Sign in

Don't already have an account? [Register](#)

## Sign In

Username

Password

[Register](#)


[Reset  
password](#)

---

[Sign in via your Institution](#)

×

Pay-Per-View Access  
\$40.00

 **BUY THIS ARTICLE**

