

Unveiling The Virtual Classroom: An In-Depth Analysis Of The Online

Education System

Online classes and technology have emerged as a superhero during the lockdown days. We have all been under house arrest but are still connected with the world of education. Due to the lockdown, students have not been able to stay connected with the outer world and the lack of exposure is evident. The only reprieve for the students' mental well-being has been the transition to online classes. Teachers made sure that the learning for students was not compromised, so they took a great leap forward to find solutions and create new learning environments for their students to ensure that learning never stops. With the rapid advancements in technology and the widespread availability of internet access, online education has gained significant popularity in recent years.

This project aims to delve deep into the various aspects of online education, examining its strengths, weaknesses, opportunities, and challenges. The outcomes of this project will provide valuable insights for educational institutions, policymakers, and online learning platforms to enhance the effectiveness and accessibility of online education. This analysis of the online education system aims to contribute to the ongoing dialogue on the future of education and help shape a more inclusive, engaging, and effective learning environment in the digital age.

Literature Review:

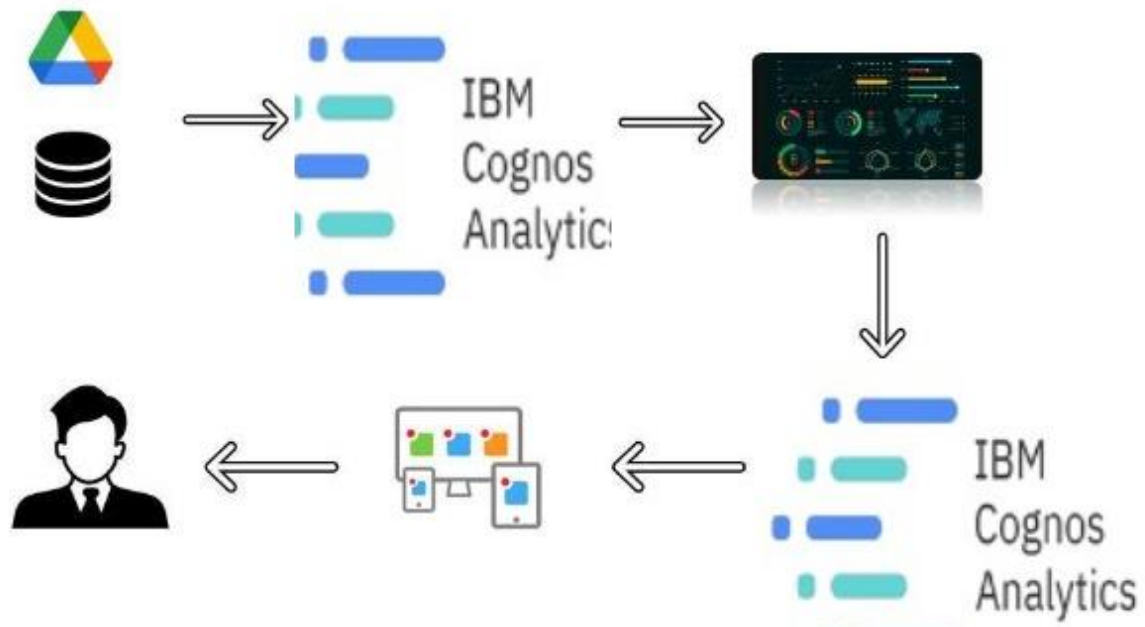
Social distancing has been essential during the COVID-19 pandemic to slow the spread of the disease. Online learning ensures students can participate in learning activities while also maintaining a physical distance from other students. Although online learning was used to prevent the spread of COVID-19, the development of online learning has also been promoted. Stecuła, K.; Wolniak, R. Advantages and Disadvantages of E-Learning Innovations during COVID-19 Pandemic in Higher Education in Poland. J. Open Innov. Technol. Mark. Complex. 2022, 8, 159. <https://doi.org/10.3390/joitmc8030159>. The digital divide in online learning in China during the COVID-19 pandemic. This study examined equity issues in online learning in China during the COVID-19 pandemic. The study used data from the Online Learning Survey of High School Students in China to analyse the influencing factors of the first, second, and third-level digital divide. The study found that the digital divide existed in online learning during the pandemic

Social and business impact of online learning:

Online classes is an effective tool for the development of educational sector in India. Online learning use the modern technology in learning. It clear the concepts of the students inspite of cram. It can be used by the students and educators in homes, schools, higher education, business and other settings

Evidently, the positive impacts of online learning are far-reaching. From increased engagement and information retention to improved collaboration

Technical Architecture :



Project Flow :

To accomplish this, we have to complete all the activities listed below,

- Define Problem / Problem Understanding
 - Specify the business problem
 - Business requirements
 - Literature Survey
 - Social or Business Impact.
- Data Collection
 - Collect the dataset
 - Connect data with IBM cognos
- Data Preparation
 - Prepare the Data for Visualization
- Data Visualizations
 - No of Unique Visualizations
- Dashboard

- Responsive and Design of Dashboard
- Story
 - No of Scenes of Story
- Report
 - Creating a report
- Performance Testing
 - Amount of Data Rendered to DB ‘
 - Utilization of Data Filters
 - No of Calculation Fields
 - No of Visualizations/ Graphs
- Web Integration
 - Dashboard and Story embed with UI With Flask
- Project Demonstration & Documentation
 - Record explanation Video for project end to end solution
 - Project Documentation-Step by step project development procedure

Collection of Dataset

Data contains all the meta information regarding the columns described in the CSV files. we have provided 1 CSV files:

Online Education System Review

ONLINE EDUCATION SYSTEM REVIEW.csv

Column Description for Online education system review:

- Gender: Gender of the student
- Home Location : Rural or Urban.
- Level of Education : UG, PG or school
- Age : age of the student

- Number of subjects :
- Device Type Used : device used to attend the online classes
- Economic status : economic status of the family
- Internet facility in your locality
- Are you involved on any sports
- Family Size
- Do elderly people monitor you ?.
- Study Time(hours)
- Sleep time (hours)
- Time spent on social media(hours)
- Interested in gaming ?
- Have a separate room for studying ?
- Engaged in group studies ?
- Average marks scored before pandemic in traditional classroom
- Your interaction in online mode
- Clearing doubts with faculties online ?
- Interested in ?
- Performance in online
- Your level of satisfaction in online education

<https://drive.google.com/file/d/1O39CDVV9CkPthvNO7z2GHbyxRPKm2Ey6/view?usp=sharing>