

Remote Learning Reminding Buddy (RLRB): Class Schedule, Attendance, Homework Management App. for Distance Learning

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Since the COVID-19 spread, countries worldwide are providing remote learning instead of in-person class learning. Many students are struggling with managing distance online learning like accessing class links and attending on time. As the educational paradigm changed, there are challenges in that the digital divide can occur according to an individual's environment. We created the application, "RLRB (Remote Learning Reminding Buddy)" to support students to manage remote learnings. RLRB is based on the client-side to reduce server load. we chose Python with QT and Sanic to make client and server. QT-based client processes most data, which reduces the server load. We used AWS for deploying servers and many technologies like docker, SSL/TLS encryption, Cloudflare proxy, etc. And anybody can access all data of Open API. A cronjob (auto-timer) for showing a pop-up and automatic entrance into virtual class will be configured automatically by class times entered. After install RLRB on the user's device, a user enters information such as name, school, grade, and class. He/she enters the link for each subject based on the student's timetable data that is sent by the education company that maintains the school records or is entered by users. Then a pop-up message will be shown on the subject' class time and the student can get into the virtual class automatically. It is important to establish a robust yet resilient education system for the present and future. We need to solve the challenges of remote learning. RLRB will be a useful tool to support.