Proposal of conversational chatbots for educational remediation in the context of covid-19

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Abstract—This paper presents a conversational chatbots solution allowing, in the context of covid-19, to support, detect and reduce deficiencies and bring students to self-training in order to develop their skills. The chatbot intervenes during formative evaluations and identifies the student's misunderstandings and directs him/her at the end of the test towards the parts of the course dealing with the concepts that have not been mastered. In the context of covid-19, one of the barrier gestures being social distancing, face-to-face classes have been suspended. Many higher education institutions that were not prepared for e-learning suddenly switched to online courses in order not to lose the academic year. Students no longer have the follow-up that they had when they were learning face-to-face. The chatbot proposed in this work could help reduce the negative effects of the covid-19 pandemic on the students' level. To allow learners to have a standardized learning environment, we have developed a plugin of the Moodle learning environment using the chatbot based on the Natural Language Processing (NLP) of Artificial Intelligence. In this work we show how our conversational chatbot is used for pedagogical remediation by indicating to the learner which chapters of the course to revise according to the gaps highlighted by the chatbot.

Keyword— educational remediation, covid-19, chatbot, NLP, AI

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