

Chapter 7

Feel-It: An Intelligent Secondary School Physics Q&A System

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Abstract Feel-It is an intelligent ‘questioning and answering system’ for secondary school Physics. The system is created to help solving open-ended Physics problems, as well as providing adaptive guidance and giving relevant learning resources from the Internet according to users’ queries. The proposed architecture for Feel-It constitutes of four basic modules: data extraction, question classification, solution identification and answer formulation. The data extraction module builds the Physics knowledge base. The question classification module identifies and analyses the question. The solution identification module solves Physics questions and selects the top n most relevant resource references. The last module, answer formulation, arranges and compiles the result as system output. Our preliminary result has shown that the system is able to produce correct answers up to 60 % of accuracy.

Keywords Artificial intelligent · Online tutoring · Physics · Q&A

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