Ho Chi Minh University of Education

**Department of Information Technology**

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**Report No.1 – 16/01/2020**

**CodEbot-AITeacher**

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# Scope & Limitations

## Supported Languages in Questioning and Answering

* Vietnamese (mixed with programming terms in English)

## Supported Programming Languages

* C/CPP
* Pascal
* Python

## Key Features

* Get some key topics for the conversation after a set of fixed questions so as to get an overall idea of how to effectively help questioners with their own problems.
* Answer basic theorical and practical questions that students often make when they just start learning programming.
* Troubleshoot common syntactic problems (compilation errors) in many programming languages.
* Describe in natural language the flow of simple programs (with a few functions) written in supported programming languages.
* Recommend tips and fixes for common problems and bugs in programming as well as how to be more fluent at programming.

# Research Plan

## Overall

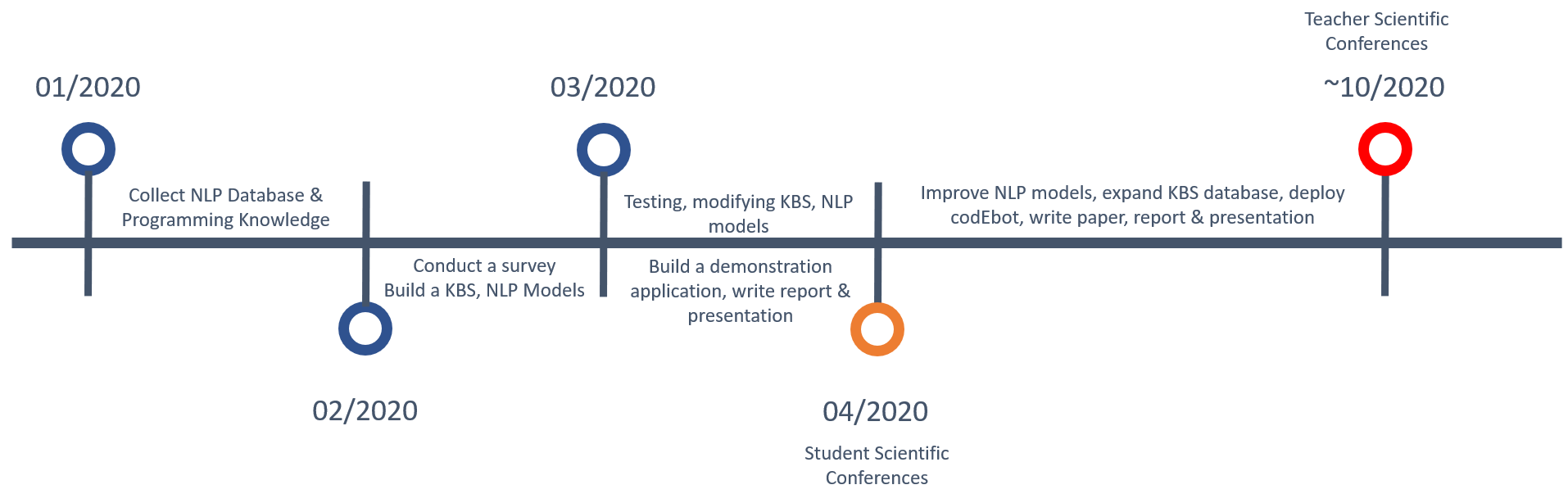


Figure . Overall timeline

## Detail

### HCMUE Student Scientific Conference

**Jan 17 – Feb 01:** Collect dataset for Natural Language Processing system, collect programing knowledge (theory, exercises, tips…) for Knowledge based System. Prepare survey question.

**Feb 01 – March 01:** Conduct a Survey for HCMUE-FIT students and some high schools in the region.

**Feb 01 – Feb 15:** Build, train & test Natural Language Processing models

**Feb 15 – March 01:** Build a Knowledge based System

**March 01 – March 25:** Test, modify NLP models, KBS. Build a demonstration chatbot.

**March 25 – April:** Write final report, presentation.

### HCMUE Teacher Scientific Conference

Not planned

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