Curriculum Builder User Documentation
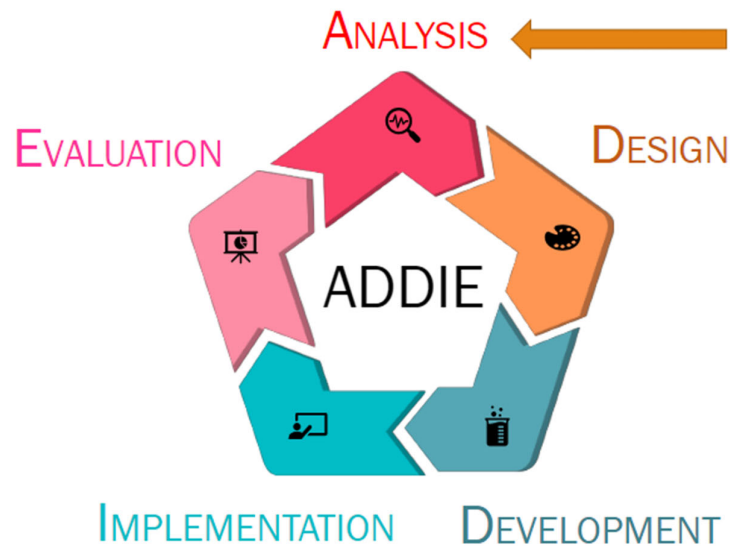
Contents

Introduction

Hello and welcome to the Curriculum Builder Web Application, an ITE CED project in collaboration with Amazon Web Services (AWS).

This Curriculum Builder is an early-stage tool that will assist you in the curriculum design process. Specifically, it fits into the "Analysis" stage of the ADDIE curriculum development model, where it will supplement the needs and task analysis in the context of the job role.

This document will guide you through use of the Curriculum Builder, including customization options and features.

Accessing the Application

Access to the application is blocked by default to prevent unauthorized use. For access request and other related enquiries, please contact the System Administrator.

The Curriculum Builder Web App can be accessed through this link: https://curr-builder.ite.edu.sg/

You will be prompted to sign in through your Microsoft 365 ITE account.

Generating Skills Standard from Existing Course

Select a Large Language Model

There are currently 3 models to choose from: Claude 3.5 Sonnet, Claude 3 Sonnet and Claude 3 Haiku.

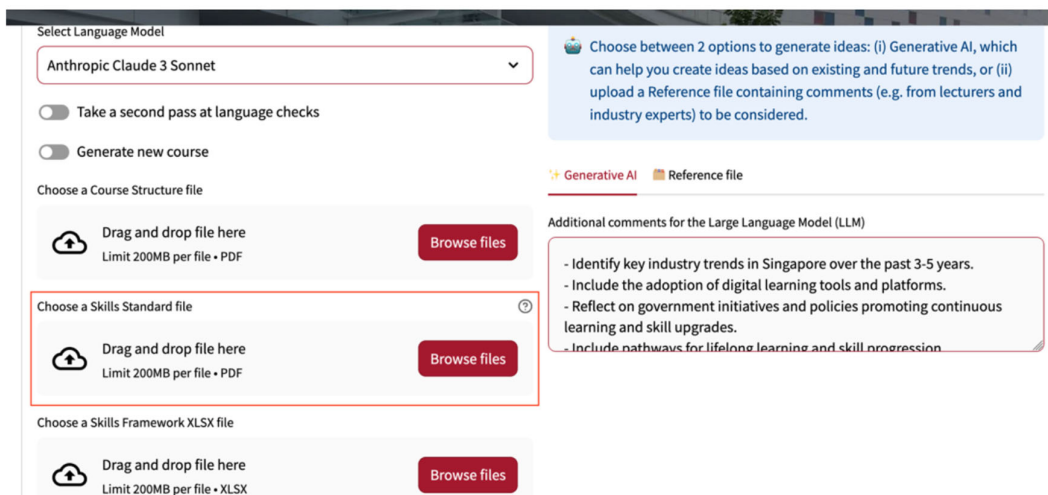Claude 3.5 Sonnet is the most performant and cost-effective model, while Claude 3 Haiku is the fastest.

Upload Skills Standard from Nitec/Higher Nitec or Certificate of Competency course

Upload Singapore SkillFuture Skills Framework Document (optional)

If you would like the app to reference the SFW document when generating the response, you can upload a copy of the SFW dataset. This dataset can be found through this link:
https://www.skillsfuture.gov.sg/docs/default-source/skills-framework/skillsframework_dataset_2024_06.xlsx?sfvrsn=e99944b6_31 or through the SkillsFuture Singapore website.

Other Input Prompts

There are two methods for further prompting of the LLM: Through User Prompts (Generative AI) or using a Reference File

a) Generative AI: A default text prompt is provided in the Generative AI section. Feel free to modify this prompt to fit your use case.

b) Reference File: You may also upload a reference file in .pdf format. This can be meeting minutes, DACUM charts, competency profiles, or even your own written notes!

NOTE: The reference file takes precedence over Generative AI. Be sure to delete the reference file upload if you would like to proceed with using Generative AI instead.

Generate Course Outline

You are now ready to generate some content! Under section 2a, you are free to input more guidelines for generating the course outline, such as how many modules you want the output to contain.

Once you are ready, hit the Generate button, which will produce the initial list of modules and competencies for the job role.

The output will show the original Modules and Competencies on the left, while the new Course Outline will be provided on the right side.

You may download the new Course Outline (as Markdown with justifications) for your reference.

Generate Performance Criteria

This section will use your generated Course Outline as input to generate a set of accompanying Performance Criteria and Technical Knowledge statements.

You may optionally input further user prompts for this section. For example, the default prompt instructs the LLM that each competency should have 3-5 performance criteria and 3-5 technical knowledge. These values can be modified to fit your use case.

Once you are ready, hit the Generate button! This may take some time, depending on the length of your course.

In the output, the new outline will be on the left-hand side and the new performance criteria and technical knowledge will be on the right-hand side.

There are 2 downloadable output files for this section: the updated Skills Standard as well as Course Markdown. The Course Markdown contains the justification for each change.

Incremental Refinements

Both Generate Course Outline and Generate Performance Criteria sections can be modified further using the Incremental Refinements feature below the initial text box. This feature allows for regeneration of the output using additional text prompt instructions.

Simply type in the instruction and click on Regenerate. The existing output will be modified to incorporate these instructions.

Do note that this will result in a complete regeneration of the output, so it is recommended that you save the existing output for reference. Because of this, it is not recommended to use the Incremental Refinements feature to remove specific lines of text in the output. It is more efficient and cost-effective to make minor alterations to the output manually.
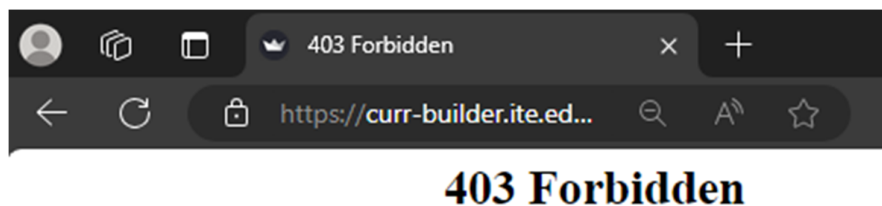
Token Control

Since the application is hosted on AWS Government Commercial Cloud (GCC), usage charges apply. Users who are granted access are automatically given 1 million tokens monthly, translating to about five full end-to-end course generations. This number will vary depending on the size of input and output. For example, a CoC course will use much fewer credits than a full 3-Year Higher Nitec course.

Once this limit is reached, access to the application will automatically be blocked. You will not be able to access the application until the 1st of the following month, where another 1 million tokens will be allocated to your account.

Note that in this current version, token usage data is tracked and controlled only through the backend dashboard. Token usage data is not visible to users within the UI.

Known Bugs and Issues

<u>403 Forbidden Error</u>

Occasionally, the "403 Forbidden" error will show up when attempting to access the Curriculum Builder. This is due to security settings that block repeated attempts to send requests to the site within a short time frame. While we work to fix this error, the solution is to wait a few minutes and refresh the page.

<u>Keyword not found</u>

Due to the way the app parses input documents, specific keywords are needed to tell the app where certain information is located. As the wording between documents may change from author to author, there is a possibility of encountering a "keyword not found" error, such as the ones shown below.

In this case, please forward the error as well as the file in question to sean_lim@ite.edu.sg so that the app's keyword registry can be updated to accommodate the file.