COMP30660
Computer Architecture & Organisation 2022/23

Assignment 3

Web 3.0, Blockchain and Smart Contracts

Due 02 April 2023 by 23.59pm

Objective

Web 3.0, also known as Web3, is the third generation of the World Wide Web. Web 3.0 is meant to be decentralized, open to everyone (with a bottom-up design), and built on top of blockchain technologies and developments in the Semantic Web, which describes the web as a network of meaningfully linked data. Blockchain technology can be used in a variety of ways to support the development of Web 3.0, which is often referred to as the "decentralized web". You have to prepare a report (Maximum of 4 pages) analyzing the role of Blockchain and Smart Contracts in realizing Web 3.0.
You should cite at least 10 sources (Scientific papers, articles, videos, interviews).

Of central importance is that you communicate the results of your analysis in terms that a non-technical person can understand.

You get points for

- Presentation (Subsections, Figures, tables)
- Content of the report
- Your Discussion and analysis

Deliverable

This project can **only be done individually or in a group up to 4 members**. Your report should consist of maximum of 4 pages with:

- **Not more than 3 pages[1] of content** presenting your analysis with a font size no smaller than 10pt Arial.
- **1 page of references** citing any sources consulted as part of your review (e.g., Scientific articles white papers, reports, online articles etc.) - using Harvard reference format
- Report should be submitted in PDF format.

[1] Content exceeding 4 pages will be automatically excluded from marking

Grading Scheme

A Grade

An A grade is appropriate when a project is Excellent in every way. It is expected that a student receiving an A Grade will have fully completed all the assigned tasks to a high degree of perfection, but in places they should also have demonstrated an ability to go beyond the assigned tasks. To obtain an A Grade the student's report, criteria and references must be excellent in every respect

B Grade

The B grade is appropriate for a Very Good submission, one provides a thorough and well-organised response to the project brief. The report needs to be very strong and should demonstrate a deep engagement with and understanding of the project, the technologies analyzed and the chosen criteria. The student must be able to demonstrate a level of analysis that goes above and beyond the average. It is unlikely that a student will merit a B grade if there are any material omissions or if there are any presentation issues.

C Grade

The C grade is appropriate for a Good project and should be assigned when the student has submitted an adequate and competent response to the project brief. The student should have addressed all the main tasks competently. The student should provide a good analysis of the two tasks. A student may still be worthy of a C grade even if there are one or two errors or minor omissions. However, if major components are missing or incomplete then a C grade may not be merited.

D Grade

A D grade is appropriate when a project is Satisfactory in as much as it demonstrates a basic grasp of the subject matter. To obtain a D grade the student needs to have addressed the two tasks but may have done so in a disorganised or inefficient manner. They should have completed most of the tasks but may have turned in some incomplete analysis. Their analysis needs to be satisfactory in the sense that it demonstrates that they have a satisfactory understanding of the technologies but may be incomplete or limited in places.

E Grade

An E grade denotes are Marginal project submission. Signs that an E grade are appropriate include:

- Incomplete analysis and/or disorganised report.
- An incomplete or very poorly written report with significant typos, poorly presented results, or an inability to demonstrate a clear understanding of the task.