

UA Measurement WG Meeting

17 August 2023

Attendees

Nabil Benamar

Dr. Matogoro

Harsha Wijayawardhana

Dessalegn Yehuala

Abdulkarim Oloyede

Anil Kumar Jain

Benjamin Akinmoyeje

Bibek Silwal

Chilufya Theresa Mulenga

Farah Adeeba

Frank Anati

Jim DeLaHunt

Joel Okomoli

Johnkenedy Kungura

John Odeh

Krislin Goulbourne-Harry

Kunle Olorundare

Malick Alassane

Millenium Anthony

Mohammad Kawsar Uddin

Prof. Ibrahim Tchakala

Stephen Dakyi

Seda Akbulut

Meeting Agenda:

1. Welcome and Roll Call
2. Updates from Dessalegn about the [UA Curricula for Academic Programs](#) prepared based on the [statement of work](#)

Meeting recording: [Link](#) , password : q?Bvh#f8+k

Meeting Notes

Nabil welcomed the guest speaker of the UA Measurement Working Group, Dessalegn Yehuala from Ethiopia, who would design the UA Curriculum modules. This is a special meeting dedicated to discuss the UA Curriculum. Nabil invited Dessalegn to take the floor to present his work.

Dessalegn explained the structure of the document and 12 modules of the curriculum. He shared briefly on the topics and demographic. Dessalegn discussed the design principles and constraints of a new curriculum, emphasizing simplicity and compatibility with existing courses.

The modular design would be a supplement as a plugin, and suitable for all learners regardless of ages. Within time constraints, this modular design would be able to deliver what is needed to be learned about the UA. If there are no objections or feedback from the meeting participants, these preparations would be used as a micro learning module as an addition to other courses. Comments from the participants were invited.

Seda helped present the document on the screen.

The team discussed incorporating practical examples to demonstrate the benefits of internationalization and filling specific gaps in existing curricula. Dessalegn proposed a revised curriculum for a programming course and the team discussed challenges in incorporating internationalization and localization concepts.

Perspective of this micro learning course:

The main point is to keep this module as simple and understandable as possible so that many people could learn about this. The second is the course not being a full blown curriculum, and to be able to add to any computer science and IT courses. Dessalegn asked the participants for comments and concerns and then continued.

Discussion on UA curriculum objectives:

Dessalegn continued going through the document.

Sandra commented - *“Consider adding plan practical testing workshops”*

Dessalegn replied that the curriculum contents are to be validated by the workshops. Once the draft of the contents are produced, the workshops would be conducted.

André Schappo commented -

My personal experience is that there is a need to enthuse students about i18n & L10n as usually they have never ever thought about it. One of the ways I do it is to give practical examples/demonstrators of the benefits of thinking international. eg A non breaking twitter hashtag can be constructed using U+30FB KATAKANA MIDDLE DOT • (for example: #André • Schappo)

So, I consider there could be relevant demonstrators incorporated into each module with the aim of enthusing and enlightening.

Will explain more at the meeting.

Dessaiegn replied that the current curriculum is based on the UA gap. We do not have to mix things up with internationalization and localization. The course is to fill up the knowledge gap and not about the deeper details yet. When we talk about universal acceptance, we want software platforms, internet and network applications to be compatible with non-ASCII level. For the second question, once the curriculum draft is finalized, workshops would be conducted for academic members, faculty staff members and university students. The workshop would be designed to validate the relevance of the contents in this process.

Benjamin asked about not being able to use the IDN domains and email addresses right now and shared his concern about improving the situation. He suggested creating a developer community of diverse language backgrounds. Dessaiegn answered that near the ending part of the UA Curriculum Objectives has answers to all these questions.

Nabil suggested Dessaiegn go through the modules to have the global idea.

UA Curriculum Modules:

Dessaiegn notified that these would be preliminary concepts and not introduced relatively complex concepts. The topics would be for quick concept coverage for three to five minutes. Dessaiegn would like the community to suggest adding some missing topics to add, or omitting some topics if they seemed too difficult for beginners.

Jim referred to Benjamin's question earlier, about the scope of the micro curriculum, and pointed out that universal acceptance is very much related to globalization, internationalization, localization and translation, use of unicode, which leads to text shaping and fonts. While Dessaiegn is trying to put a scope boundary or a limit around universal acceptance, Jim would like to add some hints of internationalization and unicode. Jim suggested adding the notes of related topics to universal acceptance. For example, to educate on the text data types and unicode encoding with single byte or multi bytes to form one character glyph, shaping ligatures, displaying them and so on.

Dessaiegn agreed that Jim's suggested topics are relevant, and explained that this could open another module of unicode encoding of text data, together with advanced programming and user interface text display. He would also add the normalization part of unicode text encoding as well.

Nabil discussed Jim's comment that the text strings are not only in ASCII, we can explain to the students about the unicode strings which have different character properties which is fundamental to universal acceptance. From there, we would be able to explain more in the advanced topics. For example, when a user is asked to enter their name using Arabic characters, the programming language should have the ability to save it, retrieve it and display or print it correctly. Dessalegn explained about the Module 1, Unicode Programming Fundamentals, which already included some introductory information of unicode encoding.

Harsha said, based on Jim's remark, when teaching the unicode, the examples of shaping for different languages is important, it might be possible to add about shaping the text. Also, Harsha suggested that internationalization or localization could be a prerequisite for this course. Dessalegn replied that we may not have control over prerequisites for the course, however, introducing the concepts whenever there is opportunity would be the way. Dessalegn requested noting this points down for future reference. Harsha highlighted that unicode topics should be included in the advanced programming courses. Harsha suggested aligning the flow of topics to be more meaningful.

There was some recommendation from Jim in Module 2.

Harsha said sorting and searching becomes very important, and suggested adding these to Module 3.

Dessalegn presented the Module 4 which includes Unicode database systems. Harsha agreed with having regular expressions in this part, and also suggested putting it elsewhere when required. And about collation, Harsha expressed that this might be too advanced, but could be discussed based on the module 3. Dessalegn agreed.

Johnkenedy asked about adding contributions to the module. His concern is about the runtime, according to data structure, whether there could be an issue with programming time. He suggested including syntax analysis to determine the time. Dessalegn requested not to get too much into details at the first stage, and save from exhausting resources. These would be basics of fundamentals, since we do not have the luxury of time to share more details and bore the students. Dessalegn would like to leave more room for students to explore on their own.

Module 5 is about internationalized domain names (IDNs). Jim added a comment about knowledge of the punycode algorithm may not be mandatory. Dessalegn would like to make sure the students understand how the U-label links to A-label. Jim just would like to point out that knowing the difference between U-label, A-label and how punycode starts with “xn--” would be sufficient. Nabil agreed. Dessalegn agreed to have some topics for classroom discussion.

Joel suggested in the chat that adding the timeline of the course would help the students plan for it better.

Dessalegn mentioned it is a blueprint now. He thanked Joel for the suggestion and he will add it later.

Seda suggested that the other part of the curriculum could be presented at another meeting for the UA-measurement WG. Everyone agreed with the proposed time slot.

The meeting will continue from module 6 onwards next week.

The meeting has ended.

Next meeting: Thursday 24 August 2023 UTC 1600

Action items

	Action Item	Owner
1	Continue the presentation of UA Curriculum	Dessalegn