



Work Item: UA Readiness Evaluation of Programming Languages and Development Frameworks

Ver.: 2020-01-17

Purpose

For pursuing its chartered mission, the Technology Working Group has set its focus on addressing UA readiness issues with programming languages and software development frameworks. Given the vastness, diversity and complexity of platforms, we aim to address the UA readiness issues in an incremental manner. The main objective is to test and evaluate the identified/selected programming language technologies and development frameworks for UA readiness.

1. Group proposing the work item: UA Technology Working Group
2. Reference to the Action plan: FY20
3. Reference to work item(s): T6, T7 and T9

Description of Work

The work builds on earlier work in UASG018 and available at uasg.tech/software and aims to test and evaluate the UA readiness of the following programming language and software development frameworks (to allow input, validation, storage, processing and display of all domain names and email addresses):

Programming Languages and Development Platforms (where relevant):

1. JavaScript, Angular, React and Vue
2. Java and Kotlin on Android
3. Swift and Vapor
4. C#, VB and ASP on .NET core
5. Go and Gin
6. PHP

This includes the functionality for mailers and/or ability to email for tested languages (Python and Java, as available through UASG018) and the additional languages and platforms (as above) will also be tested to check if these support EAI and emails for longer TLDs (e.g. as listed in UASG04).

Deliverables

The work will have the following deliverables:

1. Test case suite for testing UA readiness of programming languages (spreadsheet with test cases)
2. Report on UA readiness of programming languages, including the following
 - a. Selection of languages and platforms tested



- b. UA readiness of these languages
 - c. UA readiness of mailers and/or ability to email using the languages and platforms identified
 - d. Summary information, including the summary of work from UASG018
3. Presentation covering the contents of the report

Timeline

What should be the preferred starting date and ending date of the work item. This period should be within a financial year. This will be used as part of the contract.

1. Tentative start date: 1 Feb. 2020
2. Tentative end date:

History (if any)

This work builds on UAS018 and details published at uasg.tech/software.

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