



HARVARD UNIVERSITY
Information Technology

Engineering Definition Overview

Month XX, 2016

Day of Week

XX:00-XX:00 a.m.

Location

Agenda

- Meeting Purpose and Intended Outcome
- Drivers (5 min)
- Workgroup Overview (5 min)
- Developer, Engineer, Architect Breakdown (10 min)
- Next Steps (5 min)
- Questions (5 min)

Meeting Purpose and Intended Outcomes

Purpose

The purpose of this meeting is to propose a simple definition of engineering and to review next steps needed to ensure consistency of in the use of terminology and role descriptions across HUIT.

Intended Outcomes

- Summarize the drivers behind the exploration of role definitions for engineering
- Propose definitions and highlight areas of differentiation between the roles of Engineer, Developer, and Architect
- Propose considerations for HR and Communication planning
- Define next steps

Drivers

An effort to explore how HUIT is using the terminology “engineer” versus “developer” was initiated at the request of the University CIO in early 2015.

A cross organizational workgroup was formed to:

- Provide a simple definition of engineering
- Validate the use of term “engineering” and its applicability for HUIT
- Define the criteria to determine the appropriate use of the terminology
- Define the behaviors and skills common to engineering work
- Determine how to apply the terminology consistently across HUIT and the impact to career maps

Workgroup Overview

An engaged, cross-HUIT Working Group met in January and February 2016 to explore and propose high level content for role descriptions:

- The team intentionally defined roles for Developer/Engineer/Architect at a high-level
 - Intent was not to align these role definitions to any one specialty area (e.g. software, network, third-party vs. in-house applications)
 - Discussion around blending Developer and Engineer and using level of experience to differentiate
- Membership included 6 participants from Academic Tech Services, Admin Tech Services, Library Tech Services, Database, Network and Cloud / Devops
 - Request made for team to stay involved to help implement and socialize next steps

Developer, Engineer, Architect Breakdown

Technical
Non-technical

Developer	Engineer	Architect
Responsible for, coding and modifying application and websites . Typically works as part of a team to implement business solutions.	Responsible for designing, planning, and implementing technical solutions within specific domain (e.g; software, security, network)	Responsible for the creation of standards and policies that shape technology across an ecosystem of solutions within the enterprise.
Scope: Software Development	Scope: Systems Design and Development	Scope: Enterprise Solutions and Integration
Experience: Entry/Mid Level	Experience: Advanced	Experience: Expert
Area of Focus: Project	Area of Focus: Service	Area of Focus: Portfolio of Services
Direction from Engineers and Architects	Engage Business Stakeholders	Support Executive Stakeholders
Communicate within Project Team	Translate Business Objectives	Define Enterprise Technology Objectives
Document Systems Requirements	Guide Development Team	Collaborate on Enterprise Solutions
Build Solution to Specification	Manage to Plan (Track progress)	Communicate across Organization
Troubleshoot Application Issues	Develop Implementation Plans	Technology Leaders in Higher Ed
Identify Areas for System Improvement	Creates Technical System Design	Define Standards and Policies
	Create Technical Specifications	Create Technology Roadmaps
	Resolve System Issues	Support Complex Solutions
		Define Architectural Vision

Next Steps

This table represents the proposed communication plan to the community to inform them of the the timeline and next steps associated with the proposed definitions

Date	Activity	Description of Activity	Owner
July 2016	Seek approval from UCIO	Present role definition proposals and seek approval to conduct next steps	Jason
August 2016	Socialize with HUIT SLT	Present recommendations to HUIT Senior Leadership Team	Jason
Fall 2016	Assess Job Titles	HR to assess roles to determine impact and alignment of new proposed roles definitions	HR/SME Manager
Fall 2016	Amend job descriptions	HR to update impacted job descriptions for developer, engineer, and architect	HR/SME Manager
Winter 2016	HR outreach	Outreach to hiring managers and IT recruiters on revisions to job descriptions	HR/SME Manager
Spring 2017	Revise IT career map	Revise IT career map to reflect developer, engineer, and architect roles	HR/SME Manager
Spring 2017	Update IT academy	Update IT academy education tracks to reflect the revised job roles	HR/SME Manager

Questions?

Thank you!

