# CS320 Introduction to Software Engineering

**Project Charter** 

Jeff Boutotte, Full Stack Engineer
HPE Infosight
Hewlett Packard Enterprise

## **Table of Contents**

1.	. PU	RPOSE OF CHARTER	2	
2.	. PR	OBLEM/OPPORTUNITY STATEMENT	. 2	
		asures		
		Measurable Criteria		
		OJECT APPROACH		
		ATURESError! Bookmark not defined		
		ITICAL SUCCESS FACTORS		
	6.1	Assumptions	2	
	6.2	AssumptionsDependencies	4	
		SKS		
8.	PROPOSED OR REQUESTED TIMELINE FOR DELIVERY4			
		Y ROLES AND RESPONSIBILITIES		

#### 1. PURPOSE OF CHARTER

The purpose of this document is to describe the "Infosight Filebrowser" project for the UMass Amherst Computer Science course: Introduction to Software Engineering, COMPSCI 320.

This charter will state the scope of the software project, and provide the information required to develop project requirements, a project plan and the corresponding work items.

The intended audience of the Charter document includes the authorized project approvers and the UMass Amherst teams.

#### 2. PROBLEM/OPPORTUNITY STATEMENT

Our product aims to make the lives of customers simpler, and the cost to operate smaller, by analyzing "call-home" files, extracting useful information, and correlating that across time and across all active systems. Today, we have over 80,000 systems, and thousands of customers leveraging our web portal. In certain cases where we report a potential problem to a customer, experts within support will want to investigate further in order to rememdiate the problem for the customer. It's often the case in those times where the experts will want to look directly at the raw call-home file, rather than digging through all of our rolled up analytics, since they typically know exactly what to look for within a file. Today, the process of grabbing a call-home file for support is done manually on a case by case basis for developers.

Ideally, we would like to add a "File Browser" service into our architecture, which would be responsible for long-term storage of all call-home files, and allowing support users the ability to query for and download particular files of interest.

We additionally in the future, hope that this new service could be leveraged by other microservices in our ecosystem so that they could also benefit from having a data lake of raw files.

#### 3. Measures

#### 3.1 Measurable Criteria

The overall solution must provide a way for users to download and view raw files for individual systems through a GUI of some variety.

The following table lists general measures of success with regard to the project deliverables (refer to section 8) to be submitted by each development team to the customer. Development teams will satisfy the above system qualities by providing deliverables that conform to these measures. Deliverables for each team will be assessed according to these measures by the instructor and will be subject to approval by Hewlett Packard Enterprise (HPE).

Product vision statement	Articulates the goals for the product in line with purpose of charter of
	customer.
Product roadmap	A high-level view of the product requirements and a general timeframe for
	development and release of requirements.
Product backlog:	The comprehensive list of what is in the scope for the project, ordered by priority.
Release plan:	A high-level feasible timetable for the release of working software
Incremental delivery:	The working product functionality, demonstrated to the client, which is potentially shippable. All customer-desired functionality is covered. All customer-desired functionality is correctly specified and implemented. All system interfaces are correctly specified.

### 4. PROJECT APPROACH

The UMass class will be divided into competing teams and will be given a presentation and a scope of requirements detailed in a Charter with which to work. They will also be provided with recommendations for technologies, but these are only suggestions and not mandatory. The teams will develop their own requirements and design. These will be presented to the HPE team for sign off. Throughout the course of the project, teams will be able to ask questions to the HPE team through Professor Thota. At the end of the course, each team will give a final presentation of their project.

#### 5. FEATURES

- Users can log in and log out of a GUI.
- Users are able to browse a list of systems with some basic identifying information about each system.
- Users can browse files for individual systems.
- Users can download individual files of interest.
- Data updates should happen gracefully such that the user can view any new files uploaded in the background.

#### 6. CRITICAL SUCCESS FACTORS

#### 6.1 Assumptions

- 1. System can handle updates to data new Json files
- 2. Error-handling is in place
- 3. User-friendly interface

## 6.2 Dependencies

- HPE to provide:
  - o Data Json files

## 7. RISKS

- Skill-set of developers
- Team's knowledge of the metadata (learning curve)
- Availability of project sponsors (questions)
- Target deadline

## 8. PROPOSED OR REQUESTED TIMELINE FOR DELIVERY

Preliminary (High Level) Key Milestones	Target Dates*
Initial Project Pitch	September 6
Groups present Product vision statement; Product roadmap Product backlog: Release plan:	October 2
Incremental delivery MVP	November 1
Final Implementation and Demonstration	December 20

<sup>\*</sup>Note that these dates are approximate and are subject to change depending upon the academic schedule.

## 9. KEY ROLES AND RESPONSIBILITIES

- Project sponsors:
  - Jeff Boutotte
- Project liaison
  - o Professor Thota
- Project management
  - o One project manager per team
  - UMass students chosen by Professor Thota
- Development teams
  - UMass class divided into teams