Pandemic Open Portal
COVID-19 Global Hackathon
Project Proposal, Version 1.0.0
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1.0 Overview

This document describes the functional requirements involved in the project effort to create an online system that serves to fulfill the following Mission:
Centralize the coordination and cooperation amongst citizens, private organizations, and government personnel in a manner that drastically reduces the response times of both local and cross-regional pandemic support efforts.

The primary goal of this system is speed. The speed of response times is crucial for the current global pandemic. In order to increase the speed of coordination there must be:

- A low barrier for entry of users in to the system.
- Mitigation of any Personally Identifying Information.

The system, currently dubbed, "Pandemic Open Portal," (aka, POP), is being proposed as a Web Application built using Microsoft Technologies:

- C# .NET
- Microsoft SQL Server

The current Target of this System is identified as:

- Any institute or organization involved in providing frontline support for the COVID-19 crisis.
    - e.g., Medical Facilities

This project is in response to the COVID-19 Global Pandemic Crisis, and is being created for the official Hackathon located at:

- https://covid-global-hackathon.devpost.com/submissions

2.0 Pandemic Open Portal: Key Actors

This section details the key actors that will be involved in interacting with the system, the role they play, and the outcome of the interactions.

2.1) Actors

1. Requestor
    a. This type of Actor refers to any personnel (e.g. Hospital Staff) that is working – either directly or indirectly – with frontline support for the COVID-19 crisis.
    b. Behaviors identify by this Actor include:
        i. Submitting a Request for products or services, such as:
            1. Volunteer staff.
            2. Medical Equipment.
            3. Public services.
2. Provider
    a. This type of Actor refers to any individuals (e.g. private citizen) who is willing and available to provide services to assist the frontline support personnel amidst the COVID-19 crisis.
3. System
    a. This Actor is the Pandemic Open Portal (POP) online web application that will facility the coordination between the Requestor and Provider.
    b. The System (POP) will track non-private information, including:
        i. Requestor information:
            1. Email Address

2. Facility Phone Number
3. Facility Name and Address

ii. Provider Information
1. First Name only
2. Email Address or Phone Number
3. Preferred location to provide services
a. City, State, Zipcode

c. The system will assign an internal Requestor Number and Provider Number
i. This randomly generated Numbers will be used to help the confirmation and coordination between the Requestor and Provider.

d. The system will make available, via Web APIs, the core data elements to allow integration with external applications and systems.

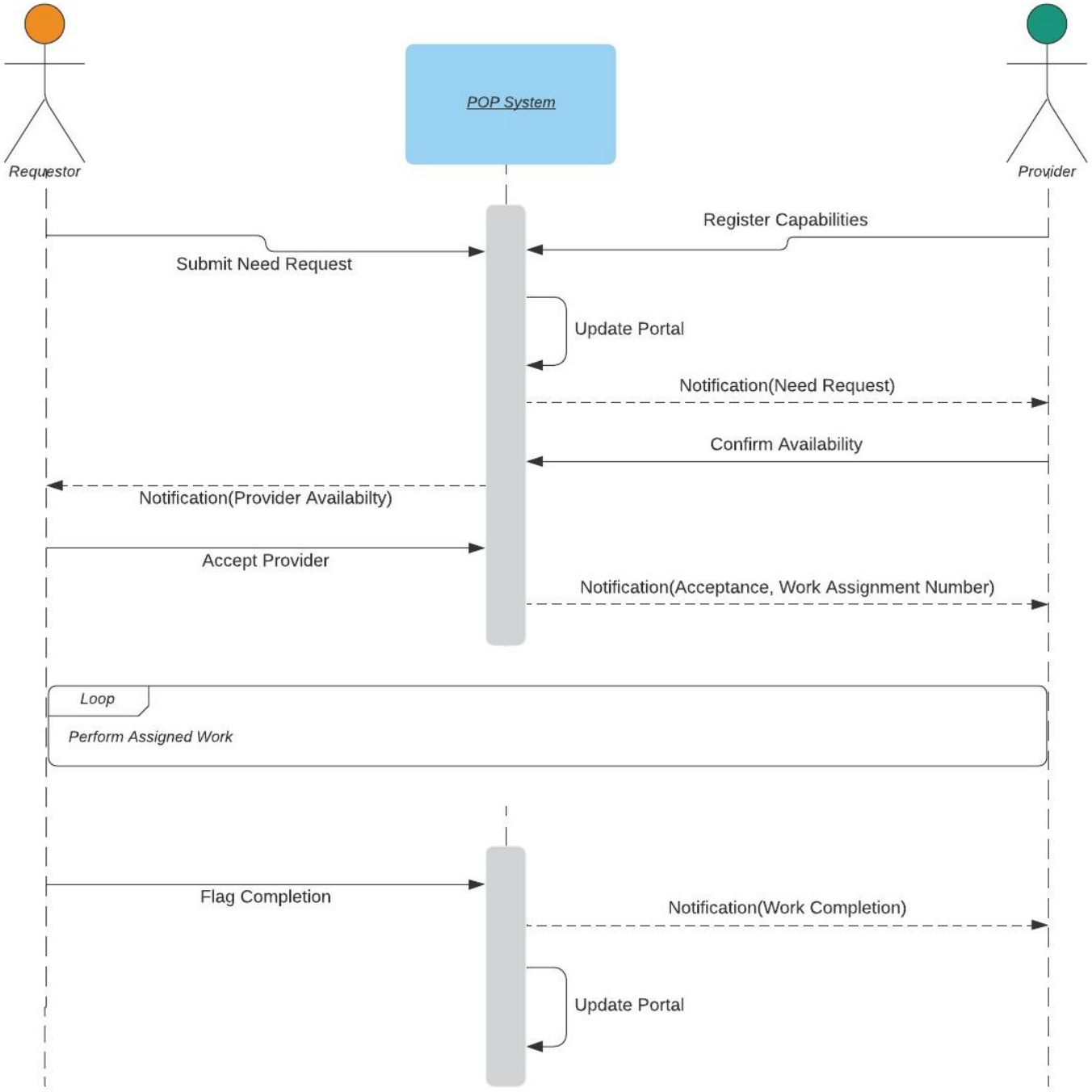
3.0 Sequence of Events

This section details the high-level workflow between the Actors and the POP System. Refer to *Figure 3.1* for the workflow sequence of events.

3.1) Workflow

1. The Requestor (Actor) will Submit an online request to identify one or more "frontline support needs."
2. The Provider (Actor) will register their available services and capabilities.
3. The System (POP) will update non-private information for the public to view:
    a. Open need requests
    b. Total available volunteers
4. The System (POP) will send notifications to the Provider when a new request is available that meets their criteria.
    a. Notation: The Provider may review any request and obtain a notification of the details in the event that the Request resides outside the Providers original criteria.
5. The Provide may accept the request received in the notification.
6. The System (POP) will notify the Requestor of the Providers acceptance.
7. The Requestor will confirm and accept the work assignment for the identified Provider.
8. The System (POP) will notify the Provider of the work confirmation and acceptance.
    a. Contact details will be provided to both the Provider and Requestor.
9. The Provider and Requestor will work together outside the boundaries of the system.
10. Upon work completion/termination, the Requestor will flag the request as complete.
    a. Notation: The System will monitor open Requests an engage the Requestor every 24 hours for updates. An Auto-Close will take place after 72 hours of inactivity.
11. The System (POP) will notify the Provider of the confirmed work completion/termination.
12. The System (POP) will update non-private information for the public to view.

Figure 3.1: Workflow



4.0 Constraints

This section should describe any constraints to the system or project.

1. For max effectiveness, the System (POP) must reside on a Web Domain that is easily accessible, in addition to being advertised and advocated for by trusted authorities.
2. The potential for high-traffic, both web and data transactions, could result in a bottleneck.
3. The “openness” of the system relies on a “trust” between end-users (e.g. Requestors and Providers).