

AmCham Bulgaria Hackathon 2026

March 20 – April 30, 2026



BUSINESS CASE:

Network Serviceability & Coverage Intelligence Tool

by Hewlett Packard Enterprise



ASSIGNMENT CONTENT

1/2

Design and develop a web-based decision-support tool that evaluates the service readiness of a warehouse and logistics network when assessing a potential new customer location. The purpose of the tool is to support pre-sales, supply chain planning, and operational decision-making by providing clear visibility into network coverage and service feasibility.

In a global logistics environment, signing a new customer requires understanding whether the existing warehouse (WH) network can support the requested Service Level Agreements (SLA), such as Same Day (SD), Next Day (ND), or alternative delivery options (PUDO points, Smart Boxes). Currently, such evaluations are often manual, fragmented, or dependent on expert knowledge. The proposed tool should provide a structured, data-driven evaluation.

Deliverable:

A functional prototype demonstrating the ability to evaluate network serviceability for a given location, accompanied by short documentation explaining the scoring logic, architecture, and design decisions.

- The goal is to create a practical, scalable prototype that reflects real-world logistics decision-support use cases and can be further extended in enterprise environments.

ASSIGNMENT CONTENT

2/2

Core Functional Requirements:

The end-product should allow a user to:

- Input a potential customer location (address or coordinates).
- Calculate distances to the closest:
 - Same Day warehouse locations
 - Next Day warehouse locations
 - PUDO points
 - Smart Boxes
- Display results in a clear dashboard including:
 - Distance and estimated travel time
 - SLA feasibility indicator (e.g., feasible / at risk / not feasible)
 - Basic service coverage score
- Visualize the customer location and relevant network nodes on an interactive map.

Technical Expectations:

The solution should include:

- A front-end user interface (web-based).
- A backend component handling distance calculations and SLA logic.
- A structured dataset representing warehouse and delivery network locations.
- Basic geolocation and mapping integration (e.g., via public map APIs).



MENTORS:

Karl Karlov, Senior Manager - Logistic Insights and Automation, HPE



TECHNICAL REQUIREMENTS:

- Basic application writing / programming skills.

SKILLS TO BE DEVELOPED

- Understanding real-world logistics and supply chain challenges
- Translating a business question into a data-driven decision tool
- Defining simple decision outcomes (e.g. feasible / at risk / not feasible)
- Working with structured datasets (warehouses, PUDO points, Smart Boxes)
- Using geolocation data (addresses, coordinates)
- Visualizing data on an interactive map
- Understanding how geography affects delivery and service levels
- Building a web-based prototype
- Developing a front end for user input and dashboards
- Implementing backend logic for calculations and scoring
- Designing simple APIs to connect components