Radio - EY GDS Hackathon LIVE

583 Registered ALLOWED TEAM SIZE: 1 - 3

REGISTER NOW

STARTS ON:
Jul 31, 2020 06:00 PM IST

HACKATHON
Online

ENDS ON:
Aug 30, 2020 11:00 PM IST

POWERED BY sprint

OVERVIEW

Fostering growth through innovation

At EY GDS, we understand that disruptive innovation is creating a vast impact on the way businesses operate today. In this ever-evolving ecosystem, staying relevant is all about reinventing and reimagining processes, methodologies, and business models. And only those can thrive who have a relentless focus on developing new approaches to solve problems.

With this in mind, we are excited to bring the very first edition of Radio Hackathon, an initiative by the Enablement Services function of EY GDS. Through this hackathon, we are inviting participants from across functions, and top-notch technology vendors to come together and work on stimulating as well as thought-provoking business challenges. You will also get an opportunity to know about your team, the problems you'll be hacking and the broader business ecosystem. The learning, in turn, will enable EY teams to embrace innovative ideas to support its business requirements more effectively.

What is the challenge about?

The participants will be asked to work on specific themes and leverage technologies such as artificial intelligence, cloud, data analytics to develop prototype solutions in an innovative way. All the participants will receive quality coaching and guidance sessions from leading EY GDS and HackerEarth professionals.

What's in it for you?

The Hackathon will offer you an opportunity to work and learn from industry's leading minds to develop leading-edge solutions using tools and resources of EY GDS. There will be exciting prizes and rewards for all winning teams as well as finalists.

THEMES

Guidelines for building your prototype solution

The Expected Statistical Solution for all 6 themes are mentioned below:

1. Solution should ideally suit for deployment in Azure cloud platform:

- The tools can leverage open source/ custom libraries/ Application Program Interface (API) from cloud platforms.
- Existing Software As A Service (SaaS)/ hosted solutions (Google Cloud Platform, Amazon Web Service etc.) except Azure should not be leveraged.

2. Preferable technology stack is C#, .net and Python for Artificial Intelligence (AI)/ Machine Learning (ML). You are also free to use libraries that are not licensed under Affero General Public License (AGPL).

AI in Capacity Management

Overview:

EY resourcing or capacity management team spend significant time and effort (~60% of total time) in performing fitment matches for a received demand and allocate the best available resource for an open demand. This fitment is performed by manually matching demand heuristics with available resources on factors such as experience, skills and competency, location, grade/ rank, bench aging and service line.

We are looking for a more efficient, automated, and intelligent demand-supply match solution.

The factors of demand heuristics may also vary between internal service lines since the preference of each service line can vary. Example: location can take precedence over experience in some, skills over location in some other.

Description:

Currently, demand-supply matching is a very manual process. It takes significant time to perform the interventions, perform various matching screens and different service lines may have different demand heuristics. The data comes from multiple sources and is heterogeneous in nature. The final results of the match may vary on the basis of the individual performing the activity. Once the check is performed, the resourcing team member allocates the resource if the fitment % is high or else reviews with the business if the fitment % is low. There is a lack of a defined algorithm to compute the fitment %..

Task:

Automate the process of matching demand with supply and allocation of resources. The solution should be able to output a rank and segment-based classification of the resources.

- The segments for classification are Best Fit (>85% match), Stretched Fit (70% to 85%) and Best Bet (60%-70%)
- Recommendation API should also be considering the weightage ranking of the factors – (experience, skills and competency, location, grade/ rank, bench aging and service line)

Resources:

- Data flow diagram
- Sample Dataset

Intelligent performance review suite

Overview:

To analyze the organizational capability consolidation of diverse talent data comprising structure, performance and potential, leadership pipeline, skill, career moves, and churn is absolutely critical for the leadership. Currently, there are multiple EY tools which provide data or records the input data of employee overall development and they are not integrated due to the above situation, the data doesn't provide any insight/ analysis to the business with regard to their talent pool. The solution being sought is to combine the data from the different sources, intelligently analyze the data and provide better insights with regard to the talent pool.

Description:

A single application/ dashboard which can provide the leadership a holistic view of the past and current performances, progress made against development activities and other performance related details.

- A consolidated dashboard which can give the leadership a better insight about the employee position in the 15-box grid
- Stack Ranking based on the teams, Service Line , SSL and BU*
- Sentiment analysis on feedbacks received through tool or emails

**- Hierarchical structure of an organization (team<Service Line<Sub Service Line<BU)*

Task:

Need to build a capability dashboard which will provide the leadership insights on:

- Churn/ attrition analysis to predict the open positions and internal fulfilment candidate
- Stack rank employees based on performance
- High performers and potential talent with the developmental gaps (in the 15-box construct)
- Available skill pool and developmental plan for the talent
- Perform sentiment analysis on feedbacks/ any other customer feedback emails to validate performance and potential

Resources:

Datasets

- Understanding 15-box construct vs 9-box construct

Credibility Calculator

Overview:

Work done by a person or company is normally evaluated based on feedback from supervisors or customers respectively. EY teams need a solution that validates the feedback, criteria, data points to measure the outcome's effectiveness and scores in a manner that allows us to eliminate intentional/ unintentional bias.

Description:

Feedback providers give feedback depending on their assessment of the deliverable against each criteria and it is very subjective. Feedback criteria and weightages can vary depending on the category of task/ deliverable. If the feedbacks are analyzed, there could be anomalies found in the feedback provided by the same person in different instances. You need to utilize the dataset that accounts for the parameters and ratings provided mandatorily for each deliverable to build a credibility calculator engine.

The goal of this solution would be to eliminate bias by identifying anomalies or consistency across a person’s or company’s feedback.

Task:

Develop a credibility calculator, integrable into other solutions.

- Feedback for the work done will be provided for each project and each deliverable
- The parameters of feedback and weightage would be different for each deliverable
- The algorithm should have a mechanism to validate the feedback score and arrive on the credibility score
- The credibility score should not be the average based on the feedback score provided against each parameter

Sample scenarios covered in the dataset provided:

- One task is performed, and the ratings are provided by one feedback provider
- Multiple phases for a single task are done and ratings are provided by different feedback providers

You are free to extrapolate the dataset provided to incorporate more scenarios.

Resources:

- Sample dataset can be found here
- GigNow

Extrapolation of datasets should be done by the team for the solution.

EY Badging

Overview:

EY teams offers its professionals a learning intervention called EY Badges which helps build competency across varying domains. Currently, there are over 100 badges on offer and the challenge is to pick the correct one.

How do we recommend the right EY badge to an employee? How do we ascertain its impact, i.e. create a mechanism to correlate the effect of badges on an individual's performance?

Description:

EY teams have a digitized learning program whereby all the professionals can access the learnings available in the site and earn various levels of badges (Bronze, Silver, Gold and platinum) both in technical and non-technical domains. Currently, the professional has to select the badge they need to undergo based on their need and also interest. They manually scan through the list of badges that are available and start their learning.

Steps involved in this process are as follows:

1. Professionals enter into the EY Badges site and navigate through the options available
2. Professionals select the badge based on their interest and need
3. There is no mechanism to monitor or see the impact of badge on individual performance

The goal is to implement a mechanism that directs professionals to pick the right badge/ learning and track the impact of badging on an individual's performance.

Tasks:

- Recommendation mechanism to the professionals on what badges they can pick up based on the below factors:
    - Job family they belong to
    - Competency profile
    - Badges earned across Global Delivery Services (GDS)
    - Duration of badge (time taken to complete a badge)
    - Promotion requirements
- Create a mechanism to monitor the impact of badge on individual performance in terms of new projects, increased efficiency, mentoring other team members, etc.

Resources:

- Sample dataset
- Details on EY Badging
- Participants are free to propose and consider the data distribution management system as per their solution

Intelligent Whiteboard

Overview:

As an organization, we have moved temporarily to 100% work-from-home due to the COVID-19 outbreak. This new way of working remotely has forced us to connect and interact virtually. This has limited our ability to collaborate effectively to conduct workshops and ideations sessions.

Though we have multiple fragmented solutions available in the market to connect and collaborate, we are wanting a single-window solution that can enable us to have effective and productive virtual connections.

Description:

A lot of manual effort is invested in converting ideas, thoughts, mind mapping, flow charts into digital format for further consumption and in making it presentable to a wider/ leadership forum.

Today, we need to rely on multiple tools to collaborate.

Example: We need to use Teams/ Skype for connecting, Mural for brainstorming or to collaborate, we need assistance to manage and keep notes and action items, multiple follow-ups, not all are technically savvy when it comes to newer solutions.

We need a one stop AI based solution on Cloud where the following can be achieved with our current solutions in focus:

- VoIP that allows users to make calls and chat with limited internet connections
- A platform where we can have facilitator-controlled breakout session (such as Zoom)
- AI based solution that can record and transcribe discussion points and action items for further follow-up

Task:

Develop an intelligent recorder, ideally suited for deployment on Azure Cloud platform, that

- Recognizes hand-drawn shapes on the whiteboard
- Recognizes the connection between different shapes/ mind mapping diagrams and calibrate the flow/ structure
- Recognizes hand-written texts
- Post recognizing items, parallelly shows multiple previews
- Allows the user to select one of the previews
- Post user selection, converts selected items into a digital format
- Fetches output in different formats. Example: Excel, Visio, PPT, PDF or Word

Resources:

- Meeting simulation

Intelligent Minutes of Meeting [MoM]

Overview:

With everyone across the organization working remotely due to the COVID-19 outbreak, virtual platforms are the new medium to connect and interact.

Develop an AI-enabled tool to tag multiple speakers from a pre-recorded meeting audio and generate the transcript along with generating the MoM summary.

The goal is to reduce the effort of manual MoM preparation to the maximum extent possible.

Description:

A web application that allows:

- Upload of a pre-recorded meeting audio file
- Display of speaker name placeholder and timestamps for each speaker detected along with the audio transcript
- Ability to manually tag each identified speaker
- Display of summary of MoM

The number and kind of speakers will be dynamic. The tool should be flexible enough to handle realistic scenarios like overlapping speakers, multiple accents, background noise and others.

Task:

Develop a web application that satisfies all the functional requirements:

- Ideally suited for deployment on Azure Cloud platform
- The tool should only leverage open-source/ custom-built solutions. Existing SaaS/ hosted solutions (GCP, AWS etc.) except Azure should not be leveraged
- Python-based ML environments should be used for development

Resources:

- Azure AI/ ML services
- Training data: any data of your choice

PRIZES

Main Prizes

Best Innovative Solution (6)
INR 75000

• Top winners (one team for each problem statement)

Consolation Prize To Other Finalists (12)
INR 2500

• INR 2,500 per participant (vouchers)