D3 2017 Hackathon – Idea Submission

Please provide your inline response to the following questions

1. What are you going to make? Please provide a high level overview and indicate what is new in the idea?

I am trying to disrupt into future of Machine Learning and Artificial Intelligence in eLearning Industry. Learning is not a new thing for any of the educators but the concept of artificial intelligence still remains unknown to teachers who are not so updated with the tech use in education. Basically, [**Artificial Intelligence**](http://edtechreview.in/trends-insights/trends/2686-artificial-intelligence-in-education-edtech)**in eLearning is still in its early ages**. However, what seems promising is that when these two techs are combined the elements of eLearning are utilized to the best with Artificial Intelligence in action. eLearning from an Artificial Intelligence tutor means that students are free to explore topics in depth, and test their knowledge in complex scenarios rather than simple right-or-wrong answers. This concept involves e-learning systems which use artificial intelligence methods and are equipped with intelligent two-way communication between the e-learning system and the user. The communication system by input a natural language between the intelligent e-learning system and its users consists of intelligent mechanisms user identification, word and sentence recognition, sentence meaning analysis, and user reaction assessment.

1. Which business vertical or domain does this product fall into?

The eLearning Solution can cater from Automotive, Aviation, Learning, HealthCare, Retail etc. The solution is such that it can identify training needs across verticals and aim to fulfill that in more intelligent and cost/time effective manner. The solution would greatly reduce cost spend by Organizations in meeting Learning curve for their associates by having a system that may in future decrease cost of purchased courses and reduce turnaround time spend in Instructor led trainings and make organizations achieve their targets in area of resource planning and effective utilization.

1. How is your idea disruptive and transformative?

My Idea is to **Disrupt and move from** **Reading to Remembering by Transforming Learning into Intelligent and Gamified one using AI & ML**. Artificial Intelligence (AI) has drawn the attention of many people in the online learning world, and interest in this fast growing trend is not going to subside in 2017. The goal of the field is to deliver computer based systems which can be used in real teaching, learning and training situations. Using AI concepts and techniques new forms of intelligent e-learning platform can be created that allow the computer to act as an intelligent learner/ tutor. Such AI based intelligent system can provide a personalized tutorial to the student based on his/her knowledge, experience, strengths, and weaknesses.

1. Is this a client specific problem that was provided by us? If so, please mention problem number.

It may cater indirectly to Problem 1-4,6,7,8,9,10,12 where motive is educating or training the system using a specified data set and extracting reasonable information to take corrective action. My e-Learning solution will also extract a similar reasoning from certain algorithms that can be modified and easily applied to these fields.

1. Is this an UMA use case? Yes / No.

Not directly but yes my system could contain a Virtual Mentor/Course Admin that would provide virtual intelligent mentoring to associates and interact lively like online professional with them.So it may be considered as one of UMA Use Case.

1. Why did you pick this idea to work on?

I picked this idea to work upon as I studied the requirements across various verticals during my tenure at UST and also my experiences in my Learning aspirations. I also had previously worked in organizations where companies are spending Lakhs of rupees in maintain eLearning systems using Licensed platforms like SABA, SCORM etc. Also Learning is very usual and monotonous.

1. Do you know if people need what you're making?

I have decided to build this system only after I have identified its need in our current organizational setup. Also I understand very exactly being a Technical Architect what associates need and how we can keep up to the Learning needs in present day so that we can contribute effectively and learn quickly.

1. What substitutes do people resort to because it doesn't exist yet (or they don't know about it)?

People usually take online Instructor courses or pay heavily at outside training institutes. Also PM and Technical Architects have to personally pursue each associate to make him achieve required competencies or keep the project competency requirement updated to meet Audit requirements. So many times they do it just for sake of Project Management Reviews or Audit Compliances but actual technical needs are left far behind.

1. What is the technology stack that you plan to use?

I plan to use AngularJS , NodeJS , Gulp , ExpressJS ,MongoDB and KiwiJS

1. You can have the last word!

The *advantages* of intelligent e-learning system include the following:

– More robustness against user’s errors and more efficient realization, control, supervision and optimization of the e-learning process with the chosen level of supervision automation.

– Improvement of the co-operation between a user and an e-learning system in respect to the richness of communication.

– Achievement of a higher level of organization of a distance learning process.

– E-learning decision and optimization systems can be remote elements with regard to an e-learning system.

Artificial Intelligence is evolving day by day and holds potential to cause great impact. Having it integrated in the eLearning systems can bring a new league of education systems that shows intelligent behaviors , a system to improve its behavior on the basis of the experience through the process of repetitive tasks and also have a notion of what is wrong and you can avoid it,  in itself is very interesting.