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Swiss IBM Watson Chatbot Challenge - 3rd Edition!

I am very proud to announce that the IBM Watson Chatbot Challenge, which was first launched in 2021, is now celebrating its third edition in 2023. This year marks my personal "3 Times is a Charm" milestone as technical lead of this competition.
The main goal of the Challenge is to bring IBM's AI technology to universities and connect them with local businesses to create a learning environment that is truly a win-win-win situation for all participants.

What is the IBM Watson Chatbot Challenge?
Each team of master students (typically 3-5 people) works on a use case during one semester in an independent learning module that is integrated into the official university schedule. The module aims to design enterprise-specific conversational AI solutions and implement them using state-of-the-art frameworks of IBM Watson Assistant and Watson Discovery.

These virtual assistants are created to solve real business cases of local companies. In the final session, each team presents and demonstrates their solution for being evaluated by the partners from a use-case perspective and by the IBM team from a technical perspective. During 12 sessions (theoretical and technical), the students learn about Natural Language Processing (NLP), Natural Language Understanding (NLU), Information extraction, dialog design, semantic search, speech recognition, speech generation, SaaS in the IBM Cloud, as well as Enterprise Design Thinking.

The technology
The technological focus is on the Watson AI services, namely IBM Watson Assistant, Watson Discovery, Watson Speech-to-Text, Watson Text-to-Speech, Watson Natural Language Understanding, etc. Depending on the use cases, the students are free to leverage other IBM Cloud technology as well, for example *IBM Cloudant*. Further, the industry partners like to see an integration into an end-user friendly user interface, e.g.: a web-interface like WebChat, but also other channels, like phone, social media (Slack, FB, WhatsApp), email, SMS or even a custom application can be required. This gives the students the possibility to really demonstrate their coding skills.

The university partners in 2023
This year we are very honored to work again with our loyal partners from the University of Applied Sciences and Arts Northwestern Switzerland (FHNW), the Hochschule Luzern (HSLU) and the Zurich University of Applied Sciences (ZHAW).
For the first time in 2023, we are proud to see that we can also welcome the University of Zurich (UZH) as one of our partners. A big thank you to our university partners who integrate

the challenge into their university schedule and offer this challenge to their students. They are motivated by the opportunity to create a learning experience to their students that stands out from classical labs and exposes them to real world use cases and technologies. Without this, we would not be able to organize the challenge each year.

The industry partners in 2023
This year we are very grateful for the possibility to work with 4 new industry partners. Without them providing their use cases, we could not offer such an inspiring program to the students.

Summary 2023
Mario Locher, Dean Heizmann and me started this year's Watson Chatbot challenge in the spring semester on 28 February. 55 students from 4 universities took part in the competition. 13 student teams were formed, whose goal was to develop creative solutions for the 4 use cases presented by our industry partners.

We were able to get the voluntary support from various IBM colleagues in Switzerland and Germany to support us with the lectures and organization. At the end of June, all 13 student teams performed their final presentations in front of the industry partners as well as the IBM team. They talked about what they have achieved during the project, what they have learned, which challenges they faced and what they see as future evolutions of their solution. The highlight, however, is a live demonstration of all the prototypes that the students developed in the roughly 3 months' time frame.
The four student teams that achieved the highest grades were invited to the winner ceremony at the IBM Research Lab in Rüschlikon, where they were presented current innovative IBM Research projects, took part in a tour around the Nano Research Center, checked out how a quantum computer looks on the inside, were personally thanked by the partners and the IBM team, and finally received their winner certificate.

Conclusion
We are always impressed by the students' creativity when building their solutions, their passion for and time invest into the project. They have shown great determination and innovation when presenting their compelling prototypes. It is astounding to see how fast the students acquire new technical and non-technical skills as well as how quickly they manage to combine that new knowledge into a presentable solution in such a short period of time.
In the name of the whole team, we would like to thank all students for their participation in, dedication for and commitment to the challenge.

In addition, the industry partners gain a better understanding of our AI technology and their own use cases, because the competing teams working on the same use cases take different approaches and focus on different thematic priorities and technical possibilities.
Likewise, IBM is gaining more advocates for the IBM brand in the university field as well as industry partners for future collaborations. We also use this opportunity to find new talent for IBM and detect opportunities for future business projects.
Sometimes, the industry partners offer job opportunities to students from our program as well. The easy-to-use and low-code Watson solutions offers a great opportunity for students to apply their theoretical knowledge of data science, machine learning and AI to real-world use cases in a practical manner.

Finally, I would like to thank all IBM supporters that help with the organization, the lectures, the execution and funding of this program, e.g. by providing free cloud credits to the universities.

We are looking forward to running this challenge again next year and further inspire other colleagues to organize similar programs in other markets or based on other IBM technology.

Winner ceremony at the IBM Research Lab in Rüschlikon