4 TOGGLE





AUDI INTRODUCES

electric charging station for EVs

ABRAR SHAREQUE KHAN

Audi's E-Tron was the first electric vehicle to be registered under the EV category in Bangladesh, and following that, on March 4, Audi Bangladesh introduced the first electric charging station in the country.





The inauguration of the electric charging charging station, and as per Audi Bangladesh, if station was held during an event at the Audi service centre, which is also where the charging station is located, Jan Janowski, Deputy Head of Mission from the Embassy of

the Federal Republic of Germany attended the inauguration. Followed by a short speech given by the guests, the inauguration took place.

To make the charging stations possible, Audi Bangladesh teamed up with a company called Siemens, which specialises in making charging stations for electric vehicles. The charging station has two power outlets so that two vehicles can be charged simultaneously. The station itself is a fast

a single car is charged, it will charge 60 watts. A regular Audi E-Tron will be fully charged from 0 in 1 hour 30 minutes. If two cars are charged together, the power splits to

30 watts for each car, and from the ground, it should take about 3 hours to 3 hours and 30 minutes to fully charge the vehicles. As per the company, this

electric charger is compatible with other electric vehicles as well, such as the Mercedes EQS and BMW iX, as they share the same charging port. However, the charging station will not support

plug-in hybrid vehicles as they don't come with the extra two pins that are in the charging port

COVER STORY

TOGGLE 5

Think Grammarly, but for Bangla:

MEET, SHOTHIK

For years, Bangla writers and speakers have struggled with spelling and grammar errors in their written communication. But a new tool called Shothik aims to change that.

clear and effective writing is essential. Whether you are writing an email, a blog post, or a social media update, your words need to be concise, engaging, and error-free. This is especially true in languages like Bangla, which are spoken by millions of people around the world but often lack adequate digital tools to assist with writing.

Enter Shothik, a cloud-based typing assistant that aims to change the game for Bangla writers. Similar to popular writing tools like Grammarly, Shothik reviews spelling, grammar, punctuation, clarity, engagement, and delivery mistakes in Bangla texts, and suggests replacements for the identified errors.

Bangla has its own set of unique grammatical rules and nuances that can be difficult to master, even for native speakers and professional writers. And while there are many online tools available for English writers there has long been a gap in the market for similar resources for Bangla writers.

That's where Shothik comes in This innovative tool uses machine learning algorithms to scan Bangla writing and identify potential errors. Whether you're struggling with spelling, verb tense, or punctuation, Shothik provides helpful suggestions to improve writing and make it more effective.

Shothik is a product of the

'Enhancement of Bangla Language in ICT' (EBLCIT) project, Bangladesh Computer Council, ICT Division. It's a government project which has been operating since 2017. Specifically, the development of the Spell checker has commenced in 2019. The motto of the project is to enhance the Bangla language and make the language a global medium.

Removing all types of constraints regarding Bangla writing and publication is another goal of this project. So Shothik was planned as a core module of 'Bangla computing' and its scope was defined keeping in mind that it should cover public demand.

HOW SHOTHIK WAS DEVELOPED

It is a data-driven application and machine learning, in a popular way AI is the key approach behind this application. The team had to use big data and large models to develop the application

Before modelling, the team processed Bangla textual data considering it is an NLP problem/s. In fact, there were multiple NLP-related problems and those problems had to be addressed and resolved accordingly.

Apart from modelling, algorithm, and software, manual data processing was the key task of this application, and it is a tedious and complex job that was nicely performed by a dedicated

linguistic team of the consulting firm in charge. Running a public-facing machine learning-based application has many challenges. The software team worked hard to build the architecture and they reinforce the project to keep it running smoothly.

As Shothik is a product of a government project, the plan and initial scope were defined by the EBLICT project. EBLICT is developing more than 40 tools and resources under 16 components. Shothik is one of them.

For Shothik, Reve is the developing partner for software development. A team from the BUET CSE department is also working as a nominated consultant for tor software testing-related activities. Moreover, All tasks are to be endorsed by the project and validated by an Expert committee.

MORE EXCITING PROJECTS IN THE

The team is now developing AI-based NLP and computer vision-related applications such as Bangla OCR and handwriting recognition system, a project on the sentiment analysis of Bangla text, Bangla speech to text and text to speech application, a project on Bangla national corpus development, Bangla sign language recognition system for those with hearing and speech impairments, screen reader and braille

for those with visual impairments, a project on digitising 40 languages of Bangladesh, including 14 endangered ethnic languages.

Apart from these, the team has also developed a universal keyboard for all languages and layouts, and a font interoperability engine. They are also developing resources and research tools for researchers and engineers, such as Bangla treebank and language models development, labelling, and tagging platform, field data collection system, etc.

In a brief email interview, the team has shared that some impactful projects will be launched soon, such as a machine translator and Bangla virtual private assistant. A good number of the aforementioned tools are already developed and under testing or in beta release. It is expected that after the completion of the tools, Bangla language will be more accessible in the information technology world.

Coming back to Shothik, the team has shared that Bangla speakers from any part of the world will be the users of this application and it is free to use. Specifically, the team hopes that printing, publication, and education sectors and government agencies will largely be benefited from Shothik. Their ultimate target is to develop an enterprise standard to freely use publicly available spell and grammar checkers.

