Institution's Innovation Council

MHRD's

Innovation Cell, AICTE

Idea Submission Form

PART A: Idea/PoC (Product/Service/Process)

Team Details

Team Lead:

Name		Email	Contactno.
Potnuru Gandeev		19211a05m7@bvrit.ac.in	7386457975

Team Members Details:

Sr.No.	Name	Email	Contactno.
1	Hemarchit Acharyulu Voleti	20215a0302@bvrit.ac.in	83309 09579
2	Kardas Charandas	20215a0307@bvrit.ac.in	96660 08927

Add more fields if required

Mentor (if any)

Sr.No.	Name	Email	Contactno.
1	K.Purnachand	purnachand.k@bvrit.ac.in	97056 90202
	V.Pradeep Kumar	Pradeepkumar.v@bvrit.ac.in	99483 59908

Add more fields if required

Institute Name and Address:

Name of the Idea/Proof of Concept (PoC)	
Theme	1. ICT, cyber physical systems, Block chain, Cognitive computing, Cloud computing, AI & ML. 2. IoT based technologies (e.g. Security & Surveillance systems etc) …… *Chose most appropriate theme (max 2) from **Annexure 1***
Define the problem & relevance to today's market/society/industry need *(Max 100 words)*	Most of them prefer to smart work than hard work. In so many industries automation have been best choice for smart work ,for the job holders it would be so tough to work with their computers getting stress bearing lots of load and one who work out may not do it proper way thinking of home security.
Propose the solution to Problem Identified *(Max 100 words)*	We have one solution for all this problem is OMNI a virtual assistant which will be converted into operating system further, which can be connected many devices like phone, laptop, home appliances etc which we use in our daily life it can be controlled by voice it will be having face detection as password, it can control the laptop by voice (we can send mail, we can play mp3 and mp4 files, we can browse, we can open a file, read a text aloud, tracking phone number, home security and activity surveillance and alert. Additional features we can add like security drone, home automation, phone call management system etc.

Describe the product/process/ service and write how it is innovative / unique. *(Max 100 words)*	In present virtual assistants we have to create accounts in them where there will be all sensitive information will be stored but here no details will be out of your device which is plus point. Avoiding the screen and working with laptop will be easy with it. Controlling the appliances through voice is time saving and make the home into smart presence. Surveillance of unusual activity and alerting the user and making the house secure. Tracking the phone number will lead us to our phone which is lost, smart phone call management system and etc.

How is your proposed product/ process/service being different/ better from a similar product/ process/ service, if any, in the market *(Max 100 words)*	We have seen Cortona, Siri, Alexa which have different features. But it consumes details like google accounts where there will be sensitive information but in this project the information will be in the user device only and it can do home automation, secure home, Controlling the appliances through voice is time saving and make the home into smart presence. Surveillance of unusual activity and alerting the user and making the house secure. Tracking the phone number will lead us to our phone which is lost, smart phone call management which are maximum not available in existing.
If your Idea is technology based, then specify the TRL Level (Technology Readiness Level) and Expecting the features of Idea/PoC. ***Note:*** *For the Idea level, TRL 0 – 2 is expected.* *For the PoC level, TRL 3 is expected.* *(Max 100 words)* *Chose most appropriate TRL level from* ***Annexure 1***	Technology formulation. Concept and application have been formulated. I have Created the preliminary prototype of the project which is test successfully closely reached to the expectations and will be completed in the further stages. Large scale prototype tested in intended environment that also means the prototype system tested in intended environment is close to expected performance
Feasibility of Idea/PoC solution (SMART) *(Check the appropriateness of the Idea/PoC)* *(Max 50 words for each from a-e)*	
(a) Specific- Specify the features of Innovative Idea/PoC.	Phone number tracking system, phone call management system, home automation, device like laptop controlling system by voice, home security management system, security drone Controlling, email sending, text reader, mp3&mp4 player, typing by voice, face detection as password which will further upgraded into voice password.
(b) Measurable- Mention the approach to convert idea/PoC to Prototype/Innovation with milestones.	Through python we can use lots of APIs to create the project and create few APIs if required. We can use raspberry pi and Arduino to create a controlling device and also make home automation and many other features
(c) Attainable- Explain how you are going to achieve the prototype development objective with the available resources at your disposal.	Through python we can use lots of APIs to create the project and create few APIs if required. We can use raspberry pi and Arduino to create a controlling device and also make home automation and many other features. We can achieve this by adding each feature as functionality in code and converting into OS using concepts of Linux and Unix.
(d) Realistic- what kind of skillset of team and resources required to achieve the goal in specific time period?	Team of CSE/IT, ECE/EEE and MECHANICAL engineering students with skills IOT, AI, Application development, one who have knowledge on operating system to complete the project within approximately 3 years.

(e) Timeline- Develop a timeline against the milestones for taking Idea/PoC to Prototype Development and (or) Commercial level/start-up stage.	It requires at least 2 years because it is packed with lots of stuff which are new formulations and it is a project which goes on upgrading and these two years are very reasonable as the features are new but familiar. This time not only sufficient for project but also to sustain the startup
Applicability of Solution 10 Marks *(Max 50 words for each from a-e)*	
(a) **Usability:** what is the usability of your innovation. *(Level of acceptance of innovation and its Features among target group)*	This project can be easily used and this make you daily things in extraordinary way This will reduce work load and secure the home. The user can be tension less regarding his home security, the user can take only important call through this call management system. The user can find his or her lost phone without any problem
(b) **Scalability:** how your innovation will be scalable at market level.	This is the age of technology where so many people want to do smart work and through this project it is possible. In this project the features can be adopted by the user or purchaser according to his wish and budget.
(c) **Economic sustainability:** Explain the potential of innovation to become profitable or financially viable.	It is a product where so many can't deny to it. Because this project reduces the burden of the user and making the work easy to him. This project makes the user stress free from heavy load work with pc/laptop
(d) **Environment Sustainability:** How your innovation is environment friendly or address environmental problems.	There is no pollution by this project, it is completely based on AI and IOT which don't damage environment. It is majorly consist software and less hardware usage
(e) Is there any Intellectual Property (IP) Component associated with innovation? if yes, explain.	No, I am going to take patent on this
Define the potential market size (in terms of INR) and target customers. *(Max 100 words)*	25000-35000 INR including home automation, extra charges dependent on the feature required from available to the user

Annexure 1

Themes:

3. Healthcare & Biomedical devices.
4. Agriculture & Rural Development.
5. Smart Vehicles/ Electric vehicle/ Electric vehicle motor and battery technology.
6. Food Processing.
7. Robotics and Drones.
8. Waste management.
9. Clean & Potable water.
10. Renewable and affordable Energy.
11. IoT based technologies (e.g. Security & Surveillance systems etc)
12. ICT, cyber physical systems, Block chain, Cognitive computing, Cloud computing, AI & ML.

9 stages of TRL:

TRL 0 : Idea. Unproven concept, no testing has been performed.

TRL 1 : Basic research. Principles postulated observed but no experimental proof available.

TRL 2 : Technology formulation. Concept and application have been formulated.

TRL 3 : Applied research. First laboratory tests completed; proof of concept.

TRL 4 : Small scale prototype built in a laboratory environment ("ugly" prototype).

TRL 5 : Large scale prototype tested in intended environment.

TRL 6 : Prototype system tested in intended environment close to expected performance. TRL 7 : Demonstration system operating in operational environment at pre-commercial scale. TRL 8 : First of a kind commercial system. Manufacturing issues solved.

TRL 9 : Full commercial application, technology available for consumers.

For any Query:

Write us at email: iic.mhrd@aicte-india.org with email subject line: "***Innovation Contest 2020 Query"***