



ಕರ್ನಾಟಕ ಸರ್ಕಾರ

NAIN Application Form for Student Teams

District: Dakshina Kannada

College: Sahyadri college of Engineering & Management

Team ID: NAIN/2016/District/**

** College to assign team number 1 to 15



New Age Incubation Network – NAIN is a chain of Incubation centres in Tier-II cities to promote them as Business destination by encouraging local talent towards exciting journey of Entrepreneurship. Projects are invited to receive funding under this scheme. Each team is expected to submit up to 5 minutes of video based on parameters defined in point number 36.



Projects will be evaluated based on following parameters and weightage:

	Parameter	Marks Allotted	
	• Technology	20	
	• Innovation	40	
	• Commercialisation Potential	20	
	• Social Impact	20	
	TOTAL	100	

SECTION – 1

Team Details

• Details of NAIN-Principal Applicant (NPA)	
• Name	Vishnu Udaikumar
• Photograph of NPA	
• Date of Birth	29/09/2001
• Gender	MALE
• Aadhaar Card Number	5076 9496 0272
• Category (SC/ST/BPL/Gen)	GEN
• Qualification	Undergraduate, Pursuing BE
• Current Affiliation Details (Institution Name)	VTU Belgaum
• Course Name & Year / Semester	BE /2nd year - 3rd Sem
• Branch / Specialization	Information Science
• Awards / Recognitions if any	Secured First Prize in Elevate50 Held at Sahyadri for the project melectrogym.
• Team Size (minimum 3 members)	4
• Nature of team (Student group / LLP / Company / Start-up)	Start-up
• Details of NAIN Team Members	
4.a Details of Each Team Member - TM	
• Name	R Snehith
• Photograph of NPA	
• Date of Birth	27/04/2001
• Gender	Male
• Adhaar Card Number	4081 6006 5881

	<ul style="list-style-type: none"> Category (SC/ST/BPL/Gen) 	Gen
	<ul style="list-style-type: none"> Qualification 	Undergraduate, Pursuing BE
	<ul style="list-style-type: none"> Current Affiliation Details (Institution Name) 	VTU Belgaum
	<ul style="list-style-type: none"> Course Name & Year / Semester 	BE /2nd year- 3rd Sem
	<ul style="list-style-type: none"> Branch / Specialization 	Electronics and Communication
	<ul style="list-style-type: none"> Awards / Recognitions if any 	Secured Best bot award in event at NIT Silchar
	4.b	
	Name	Krishna G Kamath
	Photograph of NPA	
	Date of Birth	28/01/2000
	Gender	Male
	Adhaar Card Number	3146 7196 9551
	Category (SC/ST/BPL/Gen)	Gen
	Qualification	Undergraduate, Pursuing BE
	<ul style="list-style-type: none"> Current Affiliation Details (Institution Name) 	VTU Belgaum
	Course Name & Year / Semester	BE /2nd year- 3rd Sem
	Branch / Specialization	Information Science
	Awards / Recognitions if any	Secured Best bot award in event at NIT Silchar
	4.c	
	Name	B Nagraj Baliga
	Photograph of NPA	
	Date of Birth	02/03/2000
	Gender	Male
	Adhaar Card Number	3271 4032 5294
	Category (SC/ST/BPL/Gen)	Gen
	Qualification	Undergraduate, Pursuing BE

	<ul style="list-style-type: none"> Current Affiliation Details (Institution Name) 		VTU Belgaum		
	Course Name & Year / Semester		BE /2 nd year- 3 rd Sem		
	Branch / Specialization		Electronics and Communication		
	Awards / Recognitions if any		Secured First Prize in Elevate50 Held at Sahyadri for the project Autonomous gypsy.		
	<ul style="list-style-type: none"> Roles & Responsibilities of teams 				
	Name	Qualification	Role in the Team (Tech/Finance/Market etc.)	Responsibilities	Category Student / Alumni / Local Entrepreneur
TM 1	Vishnu Udaikumar	Pursuing B. E	Tech	Developing Firmware for flight controller and Application Backend and interfacing both of them as well as Debugging for the same.	Student
TM 2	SNEHITH	Pursuing B. E	Tech	PCB Designer, Designing and Development of flight control board along with testing.	Student
TM 3	Krishna G Kamath	Pursuing B. E	Finance/Market/tech	UI/UX Designer. He is responsible for creating the user interface of the entire product, as well as looks after management of finance and marketing.	Student
TM 4	Nagraj Baliga	Pursuing B. E	Tech	PCB Designer & Electronics, Design of Power distribution Board along with flight controller.	Student

SECTION – 2 : Technology & Innovation (60 Marks)

Proposal / Idea Details

•	Project Title	EDUCATIONAL DRONE KIT-FLYfi
•	Domain of Operation of the project <ul style="list-style-type: none"> • Services • Manufacturing • Both 	Both
•	Which Area is your project proposing to address (select more than one if applicable) <ul style="list-style-type: none"> • Technology Innovation • Electronics • Transport • Food Production and Scalability • Sustainability • Education • Social Innovation • Nutrition / Health / Fitness 	<ul style="list-style-type: none"> • Technology Innovation • Electronics • Education
•	What problem is being addressed – max 100 words	<p>The unmanned aerial vehicle technology sector is growing in a rapid pace with the help of several open source platforms and contributors. All these latest technologies are helping many in various sectors all around the world, but there are many who do not have access to this wonderful new world of flying objects, simply because the hardware is expensive or there are no adequate materials to learn from. To overcome this, we have conceptualized a modular drone kit called FLYfi which can be controlled from any android/iOS phone using an easy to use app. The whole ecosystem is created keeping the cost and safety at utmost priority and helps train individuals about basic codes to advanced hardware.</p>
•	How is the problem being tackled currently without your intervention – max 50 words	<p>Students do not have access to most of the advanced hardware, software because of their high cost and availability because most of them are manufactured in china. There is no indigenously developed drone Edu kit which can be used to learn every aspect of a multicopter and controlled easily by just a smartphone.</p>

<ul style="list-style-type: none"> • 	<p>What technology intervention is being proposed by you to address the problem defined in point No 9 – max 500 words + up to 3 images / diagrams</p>	<p>Although there are many drone products available in the market and has made huge impact by doing advanced level tasks right out of the box, but these products can neither used to train an individual nor can be used by a beginner. This is because of the costs and regulations involved. There is lack of indigenously developed drone kit which is developed particularly for the education sector. This is where FLYfi stands out from the others by allowing the user from write the code to assembling the hardware. FLYfi has Four major parts: Frame or the skeleton, Main control board, power distribution and motor control board and the Mobile app. The frame houses all the components within it and provides additional safety by enclosing the propellers within it for the user. The main control board consists of central processor, Wi-Fi module for communication and additional sensors for flight stability with options to add more. The power distribution and motor control consist of sensors to regulate power surges for the safety of main control board and drive the motors based on the instructions from the main control board. The android based application connects to the drone over the air via WIFI. The app allows complete control of the drone and facilitates easy upload of the codes written by the user in platforms like Arduino using the online tutorials. FLYfi encourages its users to experiment with drone flying and in turn provides them with opportunity to learn programming, drone flying and understanding the drone systems at a very modest cost.</p>
<ul style="list-style-type: none"> • 	<p>In layman’s terms describe How does your proposed technology in point no. 9 work – max 100 words</p>	<p>FLYfi is an easy to assemble modular DIY hardware kit where the user has to connect each of the three modules as per the description in the manual. The main control board is preprogramed and the code will be available in the website which the user can modify later based on his/her needs. Once the drone assembly is complete, download the FLYfi app and connect to the drone via WIFI, that’s all it takes to setup and fly. User can write their own codes and easily upload via the app or using USB mini port provided on the board.</p>
<ul style="list-style-type: none"> • 	<p>How is solution provided by you in point No. 9 better than point no. 10 i.e. existing solutions – max 100 words</p>	<p>Although there are several drones available for the service sector, there are only limited ones available for training and education which is safe for everyone especially the kids to use. Out of the few available most are made in China and other foreign countries. This is what inspired us to develop an educational and prototyping kit which can be controlled using a mobile application and can help millions learn the basic lessons about this latest technology with ease.</p>

•	Have you carried out any literature survey and / or Patent search?	NO
•	If yes, summarise the outcome in 100 words	
•	Have you executed on the idea you are proposing, e.g. Any prototype / working model etc.?	No
•	If yes, provide details of	NO
	<ul style="list-style-type: none"> Guides / Experts / Mentors consulted so far 	
	<ul style="list-style-type: none"> Details of IPR / Patenting 	
	<ul style="list-style-type: none"> Names and Details of funding / sponsoring agency 	
	<ul style="list-style-type: none"> Market survey / actual business 	
	<ul style="list-style-type: none"> Proposed Consumers feedback 	
	<ul style="list-style-type: none"> Max 2 Photographs of the prototype / working model / outcome to be submitted 	
	<ul style="list-style-type: none"> Any other details 	

SECTION – 3: Commercialization Potential (20 marks) Feasibility / Market / Potential Customers

•	Does the host institute have facility to carry out your project	YES
•	Can the proposed work be carried out in 12 months?	YES
•	If Yes, what can be expected at end of 12 months according to you If No, Why not – Max 50 words	By the end of 12 months a finished product can be brought up as proposed earlier.
•	Market Potential based on your market research (e.g. customer interviews / competitors business trends) Please provide summary of your survey with potential customers - max 100 words	There is a huge market potential for this product in the educational field, students from various institutes, schools, colleges, drone enthusiasts are potential customers of this product.
•	How much were customers willing to pay for the product / service you offered in your potential customer interaction? Where they willing to extend an advance? – 50 words	NIL
•	Name the various Activities you must undertake during 12 months up on selection (like design, prototyping, field trial, demonstration etc.) Use these Activity names to fill details in point No. 22 & 35	Prototyping, Field Trials and MVP
•	Please fill in Quarter-wise details of Activity and their start and end date. Please calculate the funds required for each step and the same needs to be filled in Point no. 35	

Example of Activity versus time plan. These activities must also be linked to funds in point no. 35

Self-Defined Milestone		April 2020	July 2020	October 2020	January 2021	March 2021
Example	Prototype Design	Start	End			
	Prototype Manufacture		Start	Continue	End	
	Report Writing				Start	End

Project Details of Activity versus time plan.					
These activities must also be linked to fund requirement in point no. 35					
Self-Defined Milestone	April 2020	July 2020	October 2020	January 2021	March 2021
<i>Frame design</i>	Start	Continue	end		
PCB Design	Start	Continue	end		
Firmware Development	Start	Continue	Continue	end	
Application Development	Start	Continue	Continue	end	
Prototype Manufacture			start		end
Field Testing				Start	end
Final Project Closing / Status Report					
Submission of Audited Statement					
•	By when will you be able to conduct actual business? Pl mention a probable date		April of 2021		
•	Have you received / sought financial support from any other source for this work? If yes, please provide outcomes and details of funds received.		NO		
•	Do you have a mentor, If Yes please provide details If No, then provide requirement of desired mentor mentioning area of expertise.				
•	Are there similar products / solutions existing in market?		YES		
•	If Yes, then provide details of <ul style="list-style-type: none"> • Current cost of already available product • Market size • Percentage of market already captured • Any other detail 		12,500/-		
•	Any other information you might want to mention that is not already covered				

SECTION – 4

Social Impact (20 marks)

<ul style="list-style-type: none"> What is the Social Impact of the proposed Project? – max 50 words 	<p>We want to encourage the young generation to experiment with drone flying and educate them in this field.</p> <p>We plan to uplift the drone industry to the next level by empowering the young generation with the field of drones, aviation and programming.</p>	
<ul style="list-style-type: none"> Which section of the society will the outcomes of the project benefit the most? – max 50 words 	<p>Middle class</p>	
<ul style="list-style-type: none"> Any other projects / work in the area being proposed overlaps? If yes, how does the proposed project add value? 	<p>NO</p>	
<ul style="list-style-type: none"> Other details that team might want to share regarding any previous or parallel projects that have been / are being done 	<p>NIL</p>	

Overhead	Rs. 50,000										
TOTAL		1,40,000		1,30,000		60000		40000		59990	4,29,990/-
•	Total project cost: 4,29,990.00/-										
						(in figures)	4,29,990.00				
						(in words)	Four lakhs twenty-nine thousand nine hundred and ninety rupees only.				

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Student Undertaking:

I / We declare that original idea being proposed under NAIN for funding. There is no infringement of any patent or copy-write to the best of our awareness. I also undertake to follow the rules and guidelines of the host institution and the NAIN Scheme.

Principal Applicant: **Vishnu Udaikumar**

Name: **Vishnu Udaikumar**

Signature with Date:

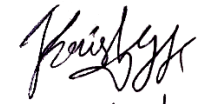


15/12/2019

All Team Members

Name: **Krishna G Kamath**


Signature with Date:



15/12/2019

Name: **B Nagraj Baliga**


Signature with Date:



15/12/2019

Name: **R Snehith**

Signature with Date:

	 15/12/2019
•	Preliminary Scrutinizing Authority: NAIN – Regional Coordinator: Remarks: Signature: Name: Date:
•	
•	Final Scrutinizing Authority: NAIN – College Coordinator: Remarks: Signature: Name: Date:
•	Forwarding Authority: Head of NAIN Host institution Remarks: Signature: Date: Stamp:

SECTION – 6 : Video Pitch

(Video to be used by judges during evaluation)

- Teams applying for NAIN funds must also provide a *short video of up to 5 minutes duration*. The video must cover following aspects.
 - Team introduction
 - Describe your idea and the problem you are trying to resolve.
 - Describe or include shots of how the problem is being resolved currently and then emphasize how your solution will be of benefit instead of present solution
 - What is the commercialization potential of your solution?
 - Include shots of market survey and customer interviews
 - Impact of the proposed solution must be brought out clearly i.e. if the proposed solution has any social or societal relevance etc.
 - Any other detail / point that the team might want the judges to know must also be covered in the video
 - This video will be used a precursor to evaluation of the form and candidates should not use this medium for any inappropriate communication.