Rajarshi Shahu Mahavidyalaya(Autonomous), Latur
Department of Information Technology

RSM - HACKATHON - S - 2021

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What is a RSM-Hackathon :

Coding competition where ,students, software programmers, developers, designers, etc. come together to build and design something.

A group of tech-savy individuals collaborate intensively to innovate and develop influential solutions to a problem using technology.

It a team event:

Predominantly, it is a team event.

Team sizes:

- ➢ Generally, the team size is limited to 1 or 3 individuals.
- ➢ Register all Team members (compulsory).

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Who can participate a RSM-Hackathon:

Depends but for the most part ANYONE. Anyone who is interested in computer programming and loves to learn and build cool stuff can attend.

➢ Students from Maharashtra.

➢ Students from all over India.

How much do I have to pay to participate a RSM-Hackathon:

➢ Individual Student pay **100** rupees for registration

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Why should I participate a RSM- Hackathon:

1. Meet new people

2. Meet recruiters

3. Not expensive.

4. Can help land an interview if you are looking for job

   opportunities.

5. Learn innovative things.

6. Helps to crack system work round in IT industry

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Topic Names

1. Education:

❖ Making education interesting

Uninteresting methods of teaching in public institutions cause young students to be easily bored which leads to a decrease in participation of children in colleges, especially boys (46% boys and 53% girls of the population eager to study)

Problem: What is the solution, in your opinion, of uninteresting teaching methods in colleges?

Hint: creatively design a digital education system.

❖ Employability

Higher education institutions do not ensure job opportunities or a job for their prospective graduate students, which lead to a greater amount of the working population unemployed.

Problem: What can be done to overcome this?

Hint: design a data-driven measurable system for the career development department of the institution.

❖ Online Examination System:

Online examination system examine get their user id and password with his/her admit card. This id is already saved in the examination server. When examine login to the server he/she get his/her profile already register. On the certain time examine gets the message to start the examination. All answers given by examine are saved into the server with his/her profile information. **Online examination system** also allows to correct the answer if

the examine needed to change any answer in the examination time duration, however, after the time duration any change will not allow.

Problem: Convert manual exam system into digital exam system.

Hint: creatively design a digital education system.

❖ Online Admission Process:

As the strength of the students is increasing at a tremendous speed, manual maintenance of student admission is very difficult. Hence, the need for online admission is inevitable. In case of manual system they need a lot of time, manpower etc. Here almost all work is computerized. So the accuracy is maintained. Maintaining backup is very easy. It can do with in a few minutes.

Problem: Develop an online admission Process management system for a college.

Hint: can be accessed throughout the organization and outside as well with proper login provided.

2. Healthcare

❖ Waste management

Poor waste management in India is a major reason of water, sanitation and hygiene problems that leads to diseases being spread easily.

Problem: What is your solution?

Hint: Use your own creativity.

❖ Make way for ambulances

The use of ambulances are not only abused, but those in dire need of it are not able to access it, thereby putting the unhealthy in a major risk of death, for example, the road has no policy in paving way for ambulances,

Problem: what might be the solution?

Hint: Open to your creativity to monitoring this.

❖ Preservatives leading to health problems

Excessive use of preservatives in fruits and vegetables leads to health problems thereby resulting in long run health risks.

Problem: How can you stop long run health problems?

Hint : Can you propose an end-to-end solution that may help citizens, from field to consumption, and reporting? (Generate mobile application.)

❖ Rural medical care

Medical care in the villages is barely sufficient and lacking in facilities, which leads to an unfair amount of deaths,

Problem: How can this be solved?

Hint: open to your creativity with uses of technology.

❖ Exercise

With the myriad of apps and tools for tracing heart rate and steps,

Problem: Point students in the direction of exercise.

Hint : To develop a digital watch

3. Governance

❖ Crowd-sourced election monitoring system

Build an app that can support any types of elections in your neighborhood during the election day. Allow citizens to report any incidents, upload photos/videos, set severity and actionable attributes along with the GPS data which will allow you to prepare a report on the election afterwards.

Problem: If you can present it as a valuable tool for transparency, you may get a good amount of exposure, however, the challenges lies in the sustainable part of it.

Hint: How are you going to monetize such a tool?

❖ Propose a better digital traffic system

India streets being completely devoid of traffic signals and traffic monitoring tools leads to an increase in traffic which thereby contribute to further air pollution.

Problem: How would you use technology to resolve this alarming issue of unruly traffic? How would you make the drivers respect your proposed system?

Hint: Develop digital monitoring system or application.

❖ Public transportation routine and monitoring

Public transport in the city lacks systematic routine and monitoring which results in an inconvenience to the locals as well as contributes to road dangers.

Problem: What is your solution to solving this?

Hint: IoT, online transportation tracking, SMS push-pull, for citizens and the authority.

❖ Rape and other abuses

Rape and other forms of violent abuse increasing, especially in college premises, public transports and other open areas.

Problem: How do you plan on battling rape/abuse in public areas?

❖ Reducing crime rates in the slums

Crime rates in the slums are highest in urban areas where majority of drug dealings, illegal transactions and mugging takes place.

Problem: How can you bring about a change in the slums using technology, where the majority of the suffering live in the city?

Hint: Develop monitoring system.

❖ Use local products/services

The level of nationalism / patriotism in the country is low, like usage of local products is discouraged and there is a tendency to 'westernize' the country, which is a pathetic representation and follow-up of our history.

Problem: How can it be ensured to have a higher dependency on local products thereby resulting in greater nationalism?

Hint: How can technology be used to address that?

4. Social Good

❖ Generation gap in technology usage

The older generation is not as easily adapted to technology as the younger generation, which leads to communication gaps between the two generations, as well as presenting itself as a social barrier.

Problem: How can you make the older generation more engaged in the world of technology?

Hint: How can technology be used to address that?

❖ Cyber criminals

No stopping of inappropriate content uploaded on the Internet, not only leads to injustice carried out but also assists in casting the wrong social morality image of India.

Problem: How can you overcome such an alarming problems like this?

Hint: what Facebook thinks appropriate, due to social reasons in countries like Indian subcontinent, might lead someone to suicide.

❖ Robotics

- Robotics is one of the best technologies which deals with design, working and applications of Robots, computer systems for their control and information processing. This technology also deals with automated machines and is very useful in manufacturing process.

Problem: How can you design Voice Controlled Robotic

Hint: Develop robot which explain college campus and handles enquiry.

5. Gender Equality and Women Empowerment

❖ Rural women unemployment

Rural unemployment of women in India causes children to be more susceptible to labor than education thereby reflecting negatively on the economy.

Problem: How can you help solve this using technology?

Hint: How can technology be used to address that?

❖ Problems of widowed women

Widowed women, in most cases, or women who have lost their current source of income are found unable to fend for themselves and their children,

Problem: how can this be solved?

Hint: offering them courses over their smart phones won't work for obvious reasons.

6. Environmental Sustainability

❖ Green institutions

Lack of recycling in offices, schools and other institutions using mass amounts of paper, which leads to a negative externals on the environment.

Problem: What is your solution to creating a eco-friendly environment in offices and other areas?

Hint: e-signature, document management system, etc.

❖ Safety in construction work

Construction workers and other forms of workers involved in hazardous jobs are never equipped with safety material and are not aware of the danger they place themselves in when they don't wear safety wear.

Problem: How can this be addressed?

Hint: IoT, and visit a real construction site, interview workers, managers and relevant stakeholders.

7. General:

❖ Indian Culture

India has one of the richest and most exciting cultural tradition in the world our culture goes back several thousands year. That is why ours is known as one of the oldest civilization in the world. India is a land of festivals. There is hardly any month of the year without any festival. Therefore the festivals also play an important in our life & they remains our culture evergreen similarly there are many states in our India, all having their own traditional dress& food also because of all this about India it has be said that India has unity in diversity.

Problems : Develop mobile application / websites on one of following

- Our Religions
- Our Languages
- Dance, Music and Art
- Our Scientist
- The Food We Wear
- Our Festivals