A hackathon is an event organised to bring together people and entities for the development of innovative solutions for the existing challenges in specified area through problem statements. The problem statements are worked upon by the participants who include, but not limited to, individuals, teams, entities from the hardware/software and coding community during the limited time-period of the hackathon. The modus operandi of a hackathon is a competitive event where the participants submit ideas, create solutions, exhibit the prototypes, and the solutions are judged by a panel to arrive at the winner/s of the hackathon. The solutions thus achieved are primarily technology driven innovative solutions which can be used or promoted by the organisers to refine the existing processes.

About HARBINGER 2021

India has witnessed significant growth in payments over the past decade with the introduction of numerous payment systems. The challenge has been to sustain the growth in payments and ensure a shift in customer behaviour towards the vision of a less-cash society by creating a framework of robust, convenient, accessible, low cost and secure digital Payment and Settlement System in the country which is adapting and evolving with time, customer and market landscape.

In order to encourage innovation in payments system, Reserve Bank of India is organising its first global hackathon - HARBINGER 2021 with the theme ‘Smarter Digital Payments’ with four problem statements to shape the future of the payment systems in India. The hackathon invites your innovative ideas for the select problem statements.

Problem Statements:

HARBINGER 2021 aims to identify and enable solutions and/or business models that have the potential to make digital payments accessible to the under privileged section, enhancing the ease of payments, enriching the experience of the users while strengthening the security of digital payments and protecting the consumers.

It aims to solve the following challenges in the payment and settlement landscape:

1. **Innovative, easy-to-use, non-mobile digital payment solutions for converting small ticket cash transactions to digital mode.**
   In order to onboard the under privileged and underserved section of the society to digital payments, non-mobile, swift and easy-to-use innovative solutions for converting small value cash payments of amount less than ₹100 to digital mode, may be explored.
This would enhance the reach of digital payments and enable a greater inclusion of the underserved into the mainstream.

2. **Context based retail payments to remove the physical act of payment.**
   Context based payments require no direct interaction between the customer and the merchant. It is mostly contingent on completion of an underlying activity and may include automatic payment at grocery stores once a customer exits the store. Different use cases in the retail segment can be thought of to enable a seamless payment experience which may include an application. The solutions may also focus on consent mechanism, fraud prevention and security features besides enhancing user experience.

3. **Alternate authentication mechanism for digital payments.**
   Presently, most of the digital payments are authenticated by a Personal Identification Number(PIN)/password/CVV followed by a One-Time Password (OTP) which is received by the remitter over his mobile phone. While the SMS through which the OTP is received is not encrypted, the instances of digital payment frauds where the users are tricked into sharing the OTP have also been observed. As such, an alternate smart secure authentication mechanism may result in more secure digital transactions.

4. **Social Media Analysis Monitoring tool for detection of digital payment fraud and disruption.**
   Social media is playing vital role of providing a platform through which the consumers can raise their concerns. The analysis of consumer complaints and concerns over platforms like facebook, twitter, Instagram, etc. may facilitate the digital payment operators as well as the regulator in taking proactive and swift action for consumer protection and fraud prevention. It may also help in the evaluation of a payment product through consumer sentiment analysis.

**Where to Apply?**

The hackathon is owned and sponsored by Reserve Bank of India and is hosted on Application Programming Interface Exchange (APIX) platform. A participant may click on the following link to register for the hackathon and submit the proposal after the registration.


Applications will be received only through the online process. RBI will shortlist the most promising solutions for further support.
**Who Can Apply?**

All relevant and impactful solutions will be considered irrespective of the stage. The eligibility criteria consist of the following:

(i) All entities, teams or individuals (eighteen years and above) who are eligible to enter into a contractual agreement and;

(ii) who possess a Minimum Viable Product (MVP) or a product available on the market or ready to be rolled out in the market and;

(iii) who have an element of innovation or novel application of technology serving common good.

Participants from all backgrounds and geographies are welcome, albeit knowledge about the Indian payment systems market and consumers is preferred.

Participants should be open to form an incorporated entity in India if they are winners of the hackathon.

**How to Apply?**

Please click on the link for registration.


Once registered, select the problem statement, and submit your proposal. Please fill in the responses for all the proposal questions.

You may apply for more than one problem statement if you fulfil all the criteria set out in each category. Your solution can aim to address the needs covered by more than one problem statement. We are looking at the uniqueness of the proposition and feasibility of the business model alongside to achieve the desired goal.

**What is the layout of the event?**

Applications will be received only through the given link. The Hackathon shall run in two phases with Ideation in the first phase and Solution Development in the second phase. RBI will shortlist the most promising solutions for further support. Wherever needed, these solutions will be provided with technical and regulatory support so that demo-able products can be created. The shortlisted entities need to submit a working solution which would be evaluated to decide the winners. The winners will be selected based on certain evaluation criteria inter alia understanding of the problem, innovation, solution comprehensiveness, ease of implementation, demonstration/user experience, etc. towards the end of the event.
Important Dates:

<table>
<thead>
<tr>
<th>Stage</th>
<th>Start</th>
<th>End</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration &amp; submission of the proposal</td>
<td>November 15, 2021</td>
<td>December 15, 2021</td>
</tr>
</tbody>
</table>

Prizes:

Winners in each category of problem statements will get prize money as given below:

Winner - ₹40,00,000 (Rupees Forty lakh)

Runner-up - ₹20,00,000 (Rupees Twenty lakh)

Contact Us:

For HARBI NGER 2021 related queries, the participants may send a mail to harbinger2021@rbi.org.in

For technical queries during registration or proposal submission process, please reach out to apixsupport@aфин.tech