2020 DSSxAMEX Online Hackathon

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Author

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Schedule

17 August ~ 6 September

Theme

The teams are expected to propose any *FinTech* solutions and implement a *Proof of Concept* or *Technical Deliverable* (a *Working Prototype*) of that particular solution. There are no designated APIs or technologies required in the solutions.

> In order to motivate the players to approach the problem from different angles, I decided to keep the problem as generic and as open as possible, which is *"FinTech"* in general.

Challenges and Prizes

There are *four* challenges apart from *the Grand Prize* of the hack that each team can apply to one of those:

- *Best UI Design*
- *Best Hardware Hack*
- *Best Data Science Solution*
- *Best Business Solution*

There will be *one* winner from each challenge. There is no upper limit for the number of applicants accepted to a challenge. The number of applicants to the challenges will be published to all to promote teams to apply to those challenges with fewer competitors.

Best UI Design

The user interface design that delivers the best user experiences and the most favourable visual presentation of the content, for examples:

- colour scheme
- compatibility of devices
- user interaction
- user journey
- ...

Best Hardware Hack

The best hardware prototype that implements a FinTech solution. Recommended devices/platforms include:

- Raspberry Pi
- Arduino Boards
- PCB
- ESP Boards
- Android Phones
- ...

Best Data Science Solution

A solution implemented with data science techniques that shows high business value, reasonable encapsulation, easy-to-use, robust performances, plausible scalability and so on.

Best Business Solution

A solution/proposal/initiative that presents high business value?

> @AMEX: We hope that American Express can guide us a guideline as to picking out the best business solution

The Grand Prize

The committee will assess all solutions regardless of the challenges applied to and select 5 teams as finalists (or 3, depending on the number of teams). The finalists get to present to AMEX on 14 September to compete for the *Grand Prize*   of Hackathon.

> *Note that* : a Grand Prize winner **does not** have to be a winner or runner up in other challenges.

Logistics

Size of a Team

A maximum of 4 players on a team. Individual players are welcomed and there will be team-forming sessions

Communication

The committee will create a *Slack* channel for the hackathon. Channels include:

- team-forming
- committee
- announcement
- mentor/help desk
- team private channels
- sponsors?
- …

Video conferencing will be conducted on *Zoom*

Events

Mentorship

The *Science* team and some society members from the committee will work as the mentor team to the players. The mentor team is an on-demand specialist team that usually operates at the **mentorship/help desk** channel for quick Q&A, tips, inspiration or consultancy. If a team requires extra help in a particular area (technical or non-technical), a mentor will be assigned to that team temporarily.

> The mentors are expected to provide assistance in the high-level concepts/structure of solutions, rather than the low-level implementations. Mentorship team is not a *debugging hotline*

Code of Conduct

@TODO

Committee and Organisation

@TODO

Submission

There will be a few deadlines for the teams to submit products based on an Agile approach. The deadlines are not mandatory but a way to motivate the teams to exercise good project management practice and Agile development methodology, making sure an MVP (*"Minimal Viable Product"*) is available and updated regularly and ensuring the committee members and mentors to be farmiliar with their projects. DDLs include:

Product	Deadline	
Project Proposal	19 August	
Product Commits	20 August ~ 6 September	
Presentation Keynotes First Draft	2 September	
Presentation Keynotes Final Draft and Product Final Commit	5 September	
Presentation	6 September	

Commits and Code Base

The code must be managed by *Git* and hosted on *GitHub* as a **public** repository. The players get to choose to be licensed under whichever protocol and choose if they want to be licensed or not.

> The developers are expected to follow the **Semantic Versioning** convention and **Git branching strategy** .

The *latest release* of that repository will be consider as the final submission on 5 September

> The developers are expected to create and manage **releases** on GitHub

README

Each repository should come with a `README.md` that states the details, environment, *quick-start guide* and information of this such.

`.gitignore`

- Ignore production environment settings (`.vscode` or `.idea`)
- Ignore complied code/cache for interpretation-based language (e.g. `.pyc` for *Python*)
- Ignore `node_modules/`
- Ignore OS-related config (`.DS_Store`)
- Ignore sensitive information(e.g. private keys, database/API credentials, tokens)
- Ignore anything unneccesary for using the technical deliverables

Technology

The players can claim the *GitHub* student pack to get free access to many paid features. Apart from that, the committee will not be able to provide any technological resources(like databases, servers, domain names)

> `github.io` is recommended as a domian name service

> @TO BE DICUSSED: publish the hackathon on *DevPost* ?