SMS-based Biometric System

In order to cater to the section of society who are not able to access financial services, Microfinance institutions reach out to them for savings, micro loans, insurance etc and provide these services at their doorstep. Often these organizations face a lot of difficulty in **authentication** of their clients. Since a majority of their activities and operations are carried out in the **rural areas** where a **working data connection** is difficult to establish, most of their applications (Web/Mobile) need to have **offline capability**.

You need to develop an SMS based biometric authentication system that is user friendly and convenient so as to connect better with the rural people. Developing an SMS-based system is not a compulsion, you are allowed to come up with other ideas too.

A basic example that needs to be covered -

A field executive registers the **biometric** (generally a **fingerprint**) id of a rural client in the village which is **stored** in a cloud server through an SMS. Similarly, on the subsequent visit, the field executive wants to authenticate the client, for this the application communicates to the cloud server through an SMS and **retrieves** the stored id.

NOTE: Apart from the designing the software module for this at a higher level with appropriate details that seem relevant, participants are recommended to come up with a working module as a prototype (in later phases of Dhiti) which can be tested and later extended for improvements.

Some points to keep in mind:

- User-friendly
- time-saving
- Accountability
- Security

Timeline

Idea Proposal (give a link to the Idea Proposal section)	January 10th, 2016
Mentorship Kicks off! (give a link to the Mentorship section)	20th January **OR** As soon as your idea is selected (whichever is earlier).
Submission of final report	7th February, 2016
Presentation in Apogee, technical festival of BITS Pilani (give a link to the Presentation section)	February 25th – 28th, 2016
Implementation Phase (give a link to the Implementation section)	Based on the preferences of the organization (if providing an internship) and student