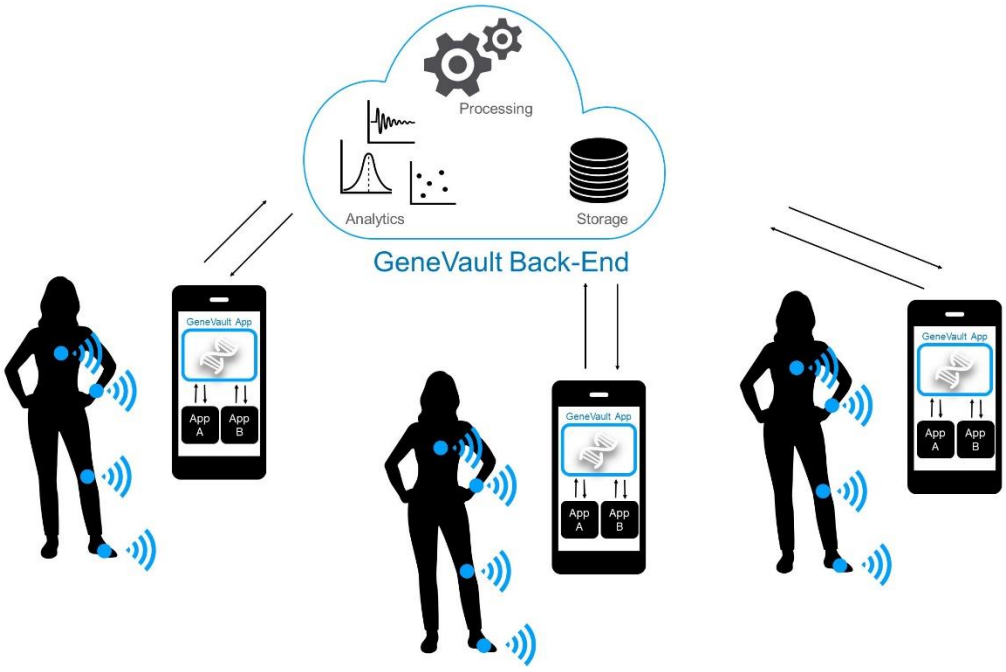
FiVu: GeveVault Use Case

As sequencing and genotyping is getting computationally cheaper, its uses extend beyond forensics. In fact, more and more companies such as Ancestry and 23andMe use it for commercial consumer-facing purposes. The most exciting aspect of bringing this technology to consumers is the potential for personalized medicine, where by tracking one's health and fitness and given their propensities to different medical conditions as derived from their sequenced genome, we can tailor drug doses and guidelines to their specific circumstances to optimize health outcomes. This in turn, can reduce readmission rates in hospitals, improve quality of life and extend life expectancy.

Consider working with one of the companies that can bring this to life. The system should support the following:

1. Enrollment. The system should be able to enroll users given their DNA samples.
2. Sequencing. The system should be able to sequence the enrolled genome.
3. Storage. The system should be able to store the sequenced genome for as long as it needs.
4. API. The system should have an API which will allow it to:
    4.1 interface with third-party applications/providers that want to offer health and fitness services given one's sequenced genome. These could be insurance companies, physicians, researchers, or other medical and health and fitness applications.
    4.2 interface with body sensors, implantable devices, and other health and fitness mobile devices to continuously collect data about one's health.
5. Interface (front-end). The system should be accessible from a mobile device and the web.

Below is a rough diagram of the main components of the envisioned system.



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