1. **Introduction**

In today’s technology genomics research is widely used for discovery of mutations and by that way, cures for human diseases can be further improved. Data sharing is crucial for this kind genomics research; however the data must be safe from being removed from existing databases by financial and political reasons, required by the organizations []. Our project, CrypDist, provides a way to access genomics data more securely. It is a decentralized distributed system which uses a distributed ledger called blockchain to record the URL links of datasets.

Blockchain is a cryptographic data structure which ensures immutability of data and avoids third-party access. It basically provides synchronization of the data links among many users and it also includes data summaries. The mentioned data is not kept in the blockchain because of its size.

1. **Packages and Tools**

* There is a local database in each of the machines which is developed by using PostgreSQL package [].
* For managing logging information, Log4j package is used which belongs to Apache Software Foundation [].
* For testing purposes, a stub server is used for uploading the data which is provided by Amazon Web Services []. In the future, Akamai services [] is planned to be configured for the project for more efficient usage.
* //TODO Timestamp server
* For build automation, we implemented the project by using Apache Maven [].

1. **User Interface**
2. **Hardware/Software Mapping**
3. **Software Architecture**
4. **Data Structures and Algorithms**
5. **Impact of Engineering Solutions**
6. **Contemporary Issues**
7. **User’s Manual**