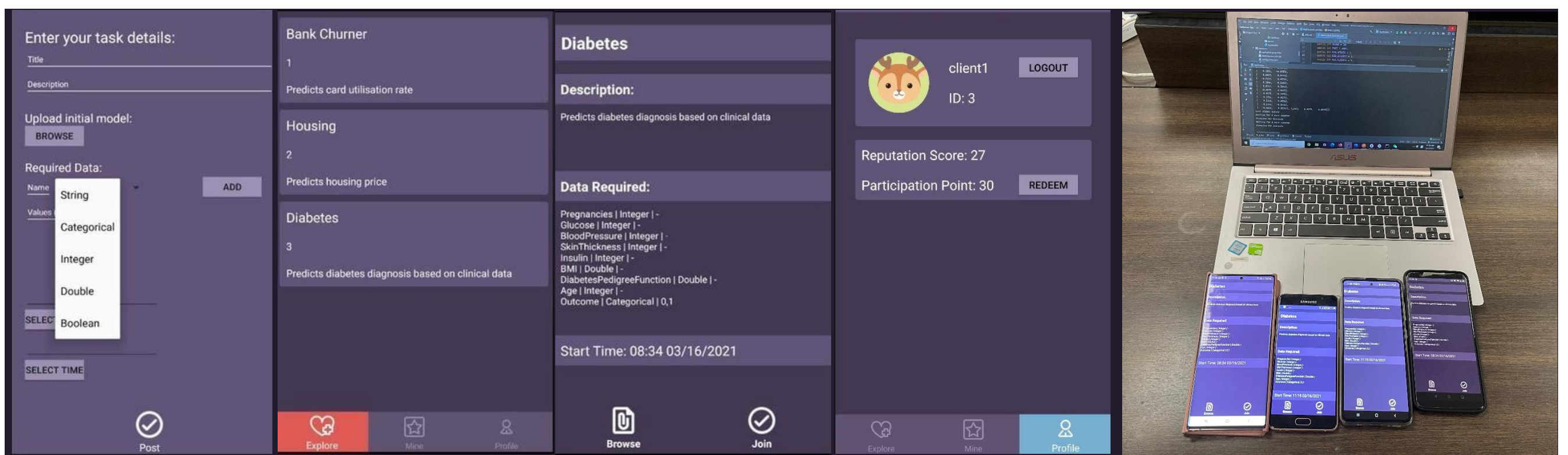# A Marketplace for Crowdsourced Federated Learning

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Abstract:

Amid data privacy concerns, Federated Learning (FL) has emerged as a promising paradigm that enables privacy-preserving collaborative model training. This project aims to create a mobile application *CrowdFL,* a marketplace for facilitating the crowdsourcing of FL model training. The model requesters can list training tasks with specific requirements, and the data owners (i.e. clients) can register their interest for the tasks that are relevant to them. It provides support for client selection, model training, and reputation management. This project also explores possible mechanisms to improve the training performance.

System Functions:

- Training task listing to recruit clients
- Participation in training tasks
- Client selection
- Model training via FL
- Incentive and reputation scheme