

School of Computer Science and Engineering College of Engineering

Smart Contract Development and Blockchain Technology Application

With Cardano

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Home Dashboard Marketplace		Home Dashboard Market	lace		
Welcome, test!	You have: 19070.463488 ADA	test3 30.00 ADA	test4 20.00 ADA	Marketplace Purchased Items	
Transfer Money	Transaction History	test3	test4		
Recipient Username:	tun hash: 6d8602e621b364ac76ac8e72c062as8ea4601b633c1172711b6f87367491a3d7			My Listings	
Amount (ADA):	txn hash: 0/2b0cb9bbcfaf8e0bb872303a4f9c0a8857972081adeb15de891c924fbe2b75	test11 100.00 ADA description for test11			
Transfer Money Expecting a transaction?	txn hash: 5dfd1b23d43075809fee96eb0f4e0ad2541c6936df9bcb9eff300b8010ba6be7	test10		All Listings	
Sender Username:	bun hash: 381ce33fc40953787cf646521bcfe4657d56880bcf30c77471e2bca576c878cb06	100.00 ADA test10			
Claim Money Made a mistake?	txn hash: 21320763dc8143a60460ab6b3652688c6f0189c09b572ab/496a013b3b605e6f			List Nom	
Refund Money	txn hash: c4s9609c17746b1d9c4278s7ad8e4a3c3445ddc7fc784d941f6a12b74ad341bf				
	bun hash: 371Ne9576aded157c3be56323fc4e859b5882bfDeeaRb02175470509703b369				

Project Objectives:

This project aims to develop a Web 3 application that will allow for peerto-peer transactions together with marketplace functionalities through Cardano smart contracts. The application is built on React as the frontend server and Flask as the backend server, with an underlying smart contract implementation using PyCardano, a Cardano library written in Python. The focus will be on the functionalities of the application and the smart contracts running them.

Features:

- Account creation and login
- Wallet creation
- Dashboard
- ADA transfer, claims and refunds
- Transaction history
- Marketplace



https://www.ntu.edu.sg/scse