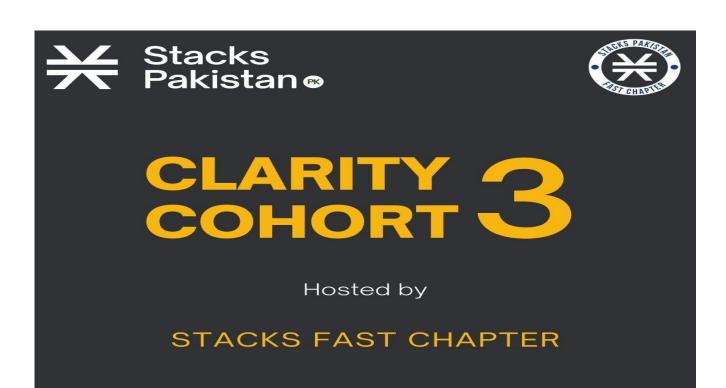# Stacks Clarity Cohort

Batch 3

Course Title : Clarity Development

Credit Hour : 3 hour

Course Instructor : Team Stacks Fast Chap.

Textbook : Clarity of mind by Marvin Jansen

References : Stacks Clarity Tools

Week No	Topic
Week 1 (By Ahmad)	**Orientation** (what we have done and what we aim to achieve further in future) ● Intro to all tools and platforms we will interact with ● Why Stacks Blockchain: Clarity vs Solidity
Week 2 (By Abdur Rehman)	● Blockchain basics (public private keypair), Importance of hashes, validating transactions, Data Structure of Blockchain ● Consensus mechanisms (Proof of work, Proof of stake, Proof of Burn) ● Cryptography basics (History --> Present --> Future)
Week 3 (By Abdur Rehman)	● Need of Smart Contracts ● Genesis Block (Block Content) ● Merkel Tree (Working and Implementation) **ASSIGNMENT - 1**
Week 4 (By Ummar Ikram)	● Clarinet/VS Code Installation + Project Setup & Structure ● Data Types (Primitives, Sequences, Composites) + Keywords
Week 5 (By Ummar Ikram)	● Functions (Public, Private, Read-only) ● Control Flow/Branching + Error Handling **ASSIGNMENT - 2**
Week 6 (By Ummar Ikram)	● Traits/Interfaces ● NFTS/FTS + SIP Standards **ASSIGNMENT - 3**

Week 7
(By Ummar Ikram)
	● Digital Art Marketplace Project (Next JS + Gaia + Clarity)
	   o Mint Digital Art as NFTs
	   o Transfer/Sell NFTs and Get STX/Money

Week 8 (Team Stacks)	● Final Note by Stacks Pakistan senior exe. ● Smart Contract Competition ● Resume Recommendations ● Most Active Participant Award

Speaker Sessions: Expert Speakers will be invited to share their valuable thoughts about a certain topic.

Important Instructions :

• You should attend the class with the camera on along with a provided picture background from Stacks Pakistan.

• You have to mark your attendance on the attendance form that will be shared with you before starting of every session

• You should be attentive during the sessions.

• You should abide by moral ethics and no vulgar or immoral activities are allowed during the sessions.

• You should be disciplined and punctual.

• Your attendance should be 70%, otherwise, you might be expelled from the program.

• You should study about the given lectures and sessions daily, you might be asked some questions from previous questions.

• Last week you will have to attempt all the projects and use cases in order to get a certificate and some other opportunities i.e recruitment and internships.

• You have to send reflection papers on daily basis to Stacks Pakistan on our email stackspakistan@gmail.com or google classroom.

• On these reflection emails you will write, what you have learned on that day, your feedback about how we can improve ourselves more.