

dCloud

A Decentralized Cloud

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Abstract

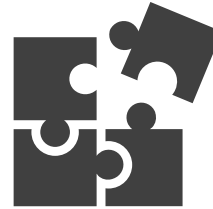
Abstract



PRIVATE



SECURE



FAULT
TOLERANT



SCALABLE

Decentralised alternative to AWS

The Problem

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Only few companies dominate the Internet

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They store, use and control users' personal data

The Problem

They store, use and control users' personal data

Gives centralized entities unfair advantage

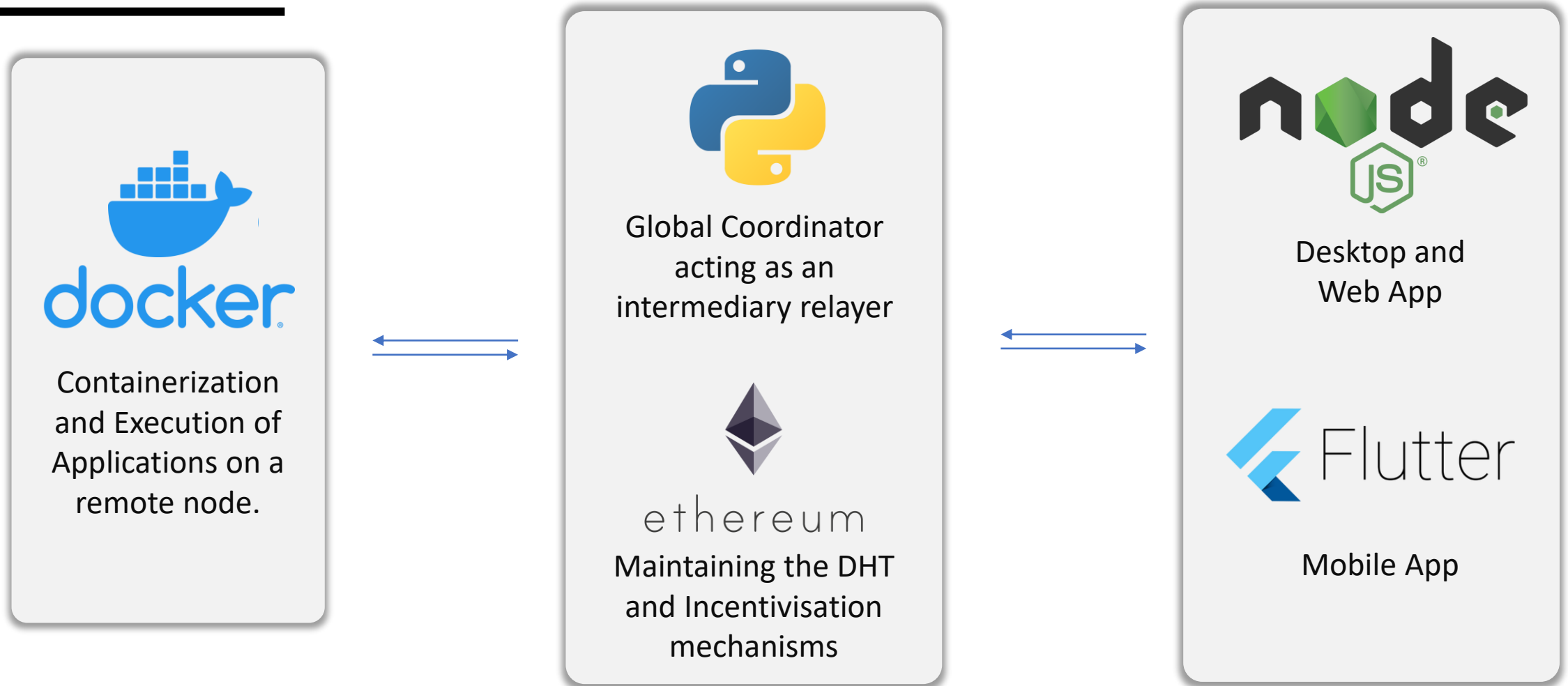
The Solution

The Solution

A distributed cloud backed by Ethereum that can store and compute data through a network of micro devices.

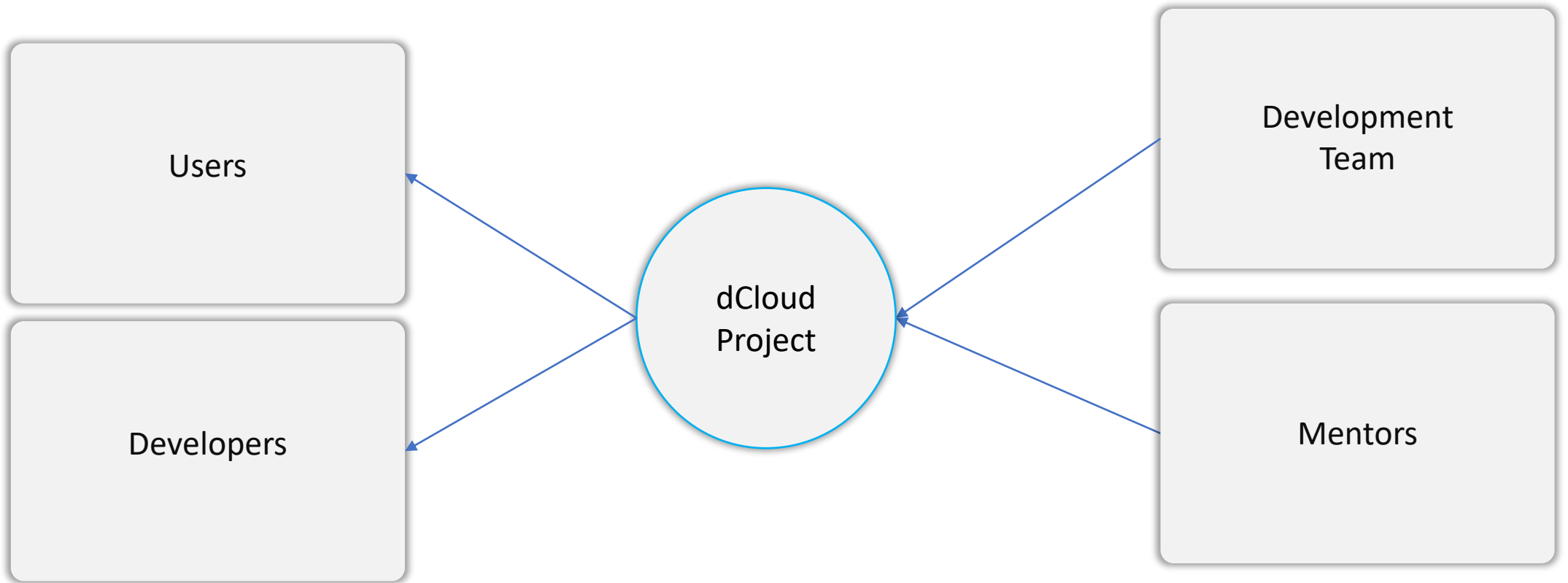
Project Setup

Project Setup



Stakeholders

Stakeholders



Users

Users

Platform Users

These are people who will access and use the applications that are deployed on dCloud

Platform Developers

These are people who will deploy their applications on top of dCloud to make them accessible by the public

User Stories

User Stories

Sprint 1

ID	Added	Description	Status	Story Points	Actual Equivalent Story Points	% Completed
100	onset	Be able to login/logout in the application	C	1	1	100
100	Onset	Be able to fetch the user data from the profile	C	1	1	100
Acceptance Criteria			Verification			
110	The user must have appropriate ID and password		The password is encrypted and set to the backend for verification			
111	ID should automatically logged out after 1 hr of idle time		The user session is expired if the site is left open for too long with no activity to ensure security			
Id	Tasks			Resources		
1	Fetch the correct API tokens for login			Anudit Nagar		
2	Create a login interface for the user to be able to Input Credentials			Aachman Garg		
3	Check and maintain user credentials			Vinayak		

User Stories

Sprint 2

ID	Added	Description	Status	Story Points	Actual Equivalent Story Points	% Completed
200	onset	As an user I must be able to connect and import various code sources like GitHub and GitLab	C	2	2	100
200	Onset	As an user, I should be able to access my connected repositories	C	3	3	100
Acceptance Criteria			Verification			
211	The user must have Github/GitLab account and be able to allow access to the code.		The user is able to connect their account and import code.			
212	The accessible code should be checked before deploying		The imported code is correctly compiled and checked before deploying.			
Id	Tasks			Resources		
1	Maintain Auth Tokens and			Anudit Nagar		
2	Maintain User's codebase internally			Anudit Nagar		
3	Create a front end for the user to be able to access and import code			Aachman Garg		
4	Maintain records of builds and build logs			Vinayak Tiwari		

User Stories

Sprint 3

ID	Added	Description	Status	Story Points	Actual Equivalent Story Points	% Completed
300	onset	As an user I must be able to create and host the application	C	7	7	100
311	onset	The application should be containerized and deployed	C	8	8	100
Acceptance Criteria			Verification			
311	The created application should be compiled and sent to the backend		The application is configured correctly, compiled and sent to the backend for propagation.			
312	The compiled application is then containerized and distributed to the network.		The application is packaged, containerized and sent to the required nodes in the network			
Id	Tasks			Resources		
1	Create a front end for the user to be able to discover/access the application			Aachman Garg		
2	Compile, Package and Containerize the Applications			Anudit Nagar		
3	Find a suitable node in the network and send the application to it to run			Anudit Nagar		
4	Maintain record of active nodes over DHT			Vinayak		

User Stories

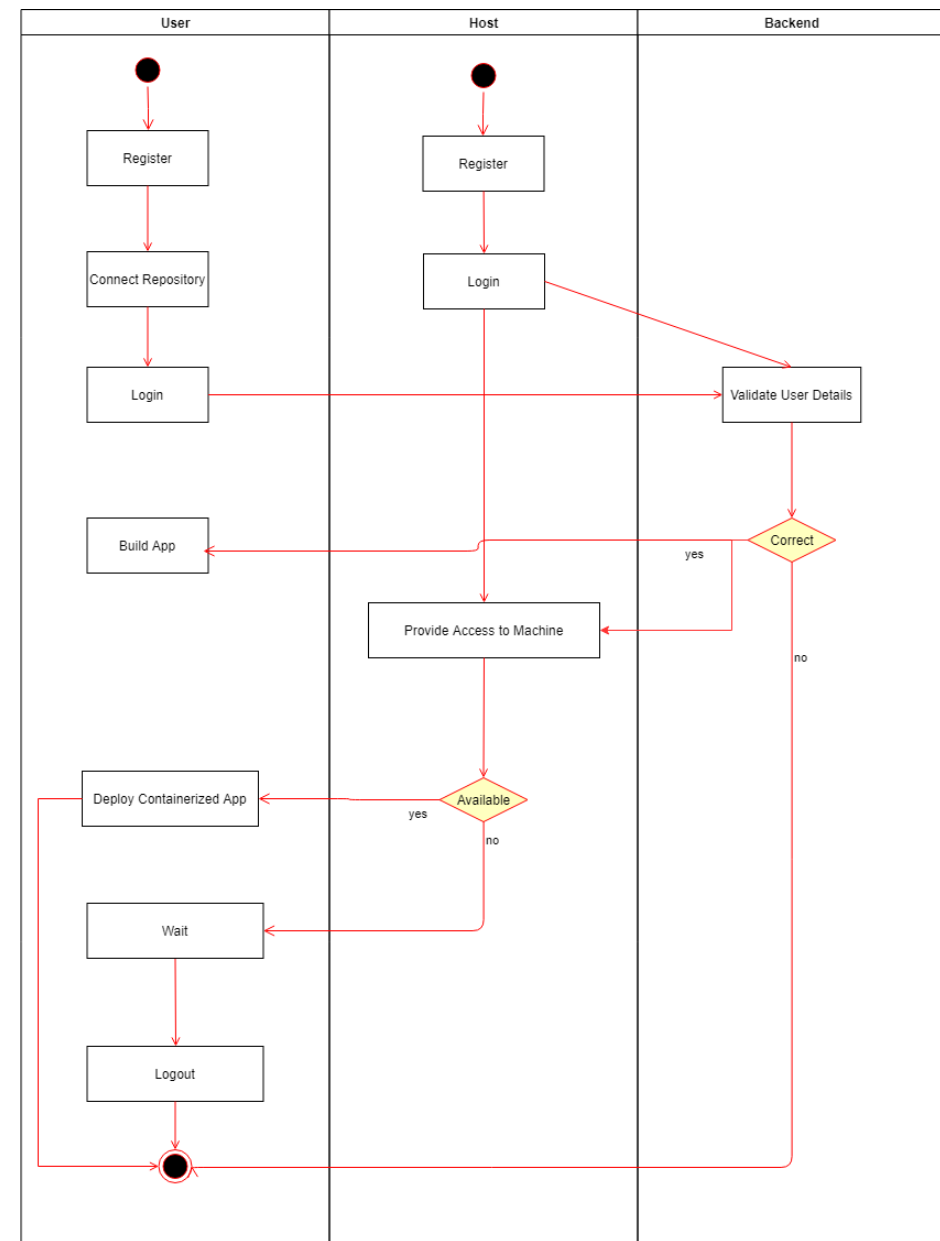
Sprint 4

ID	Added	Description	Status	Story Points	Actual Equivalent Story Points	% Completed
400	Onset	As a User of platform, I want to be able to access the applications deployed on it on my phone.	C	4	4	100%
401	Onset	As a User of platform, The deployed applications should be accessible via a URL on my computer.	C	4	4	100%
Acceptance Criteria			Verification			
400	When the page is visited the application should load correctly.		The url link is open on a browser on Mobile and Computer to verify if the site loads correctly.			
401	The URL should point to the correct application.		When the application loads it should be the one that was intended to open.			
Id	Tasks			Resources		
1	Setup DNS over DHT and make the url point the application.			Anudit Nagar		
2	Create a front end for the user to be able to discover/access the application			Aachman Garg		
3	Maintain and update DHT over blockchain			Vinayak Tiwari		

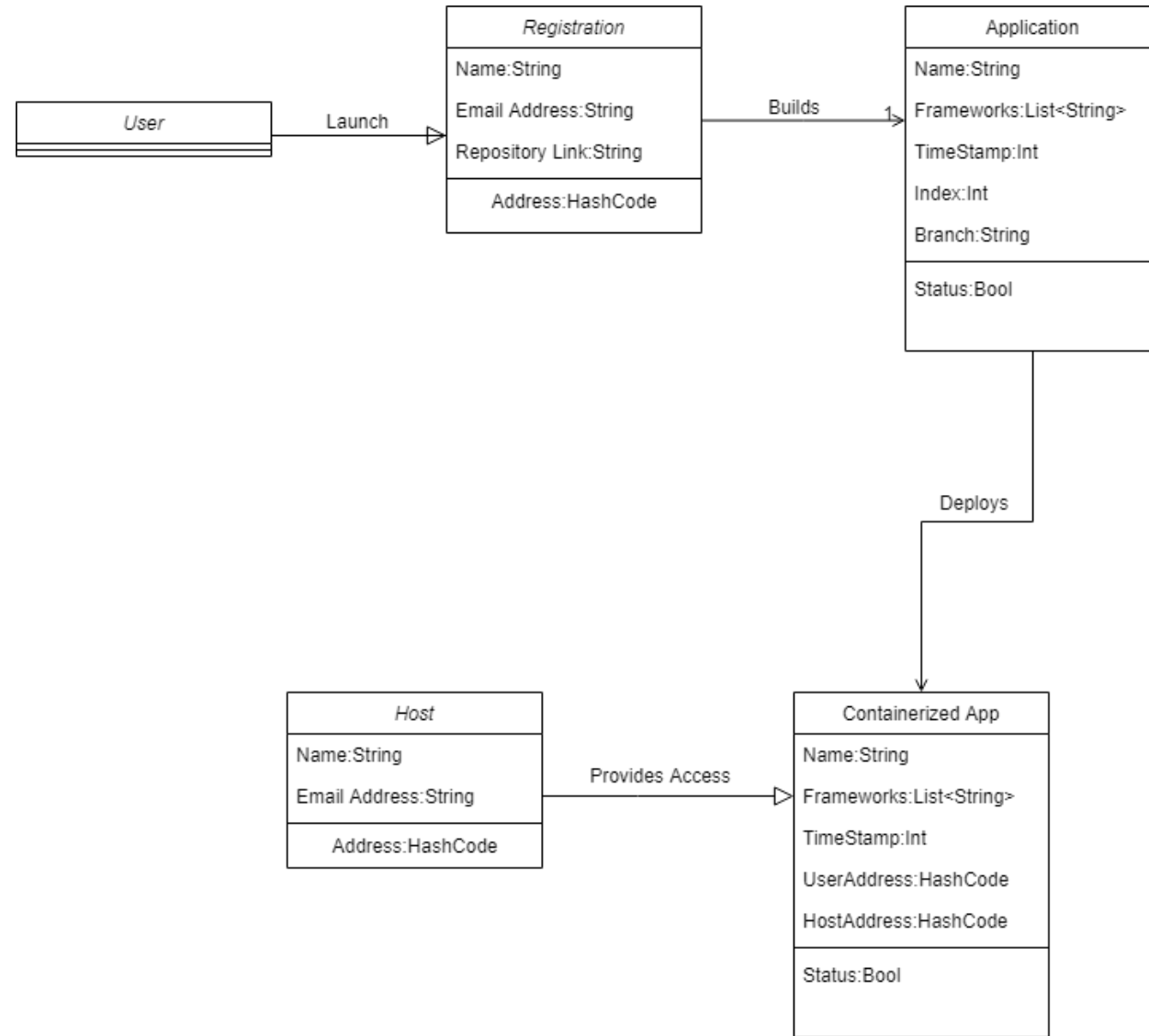
Use Case Diagram



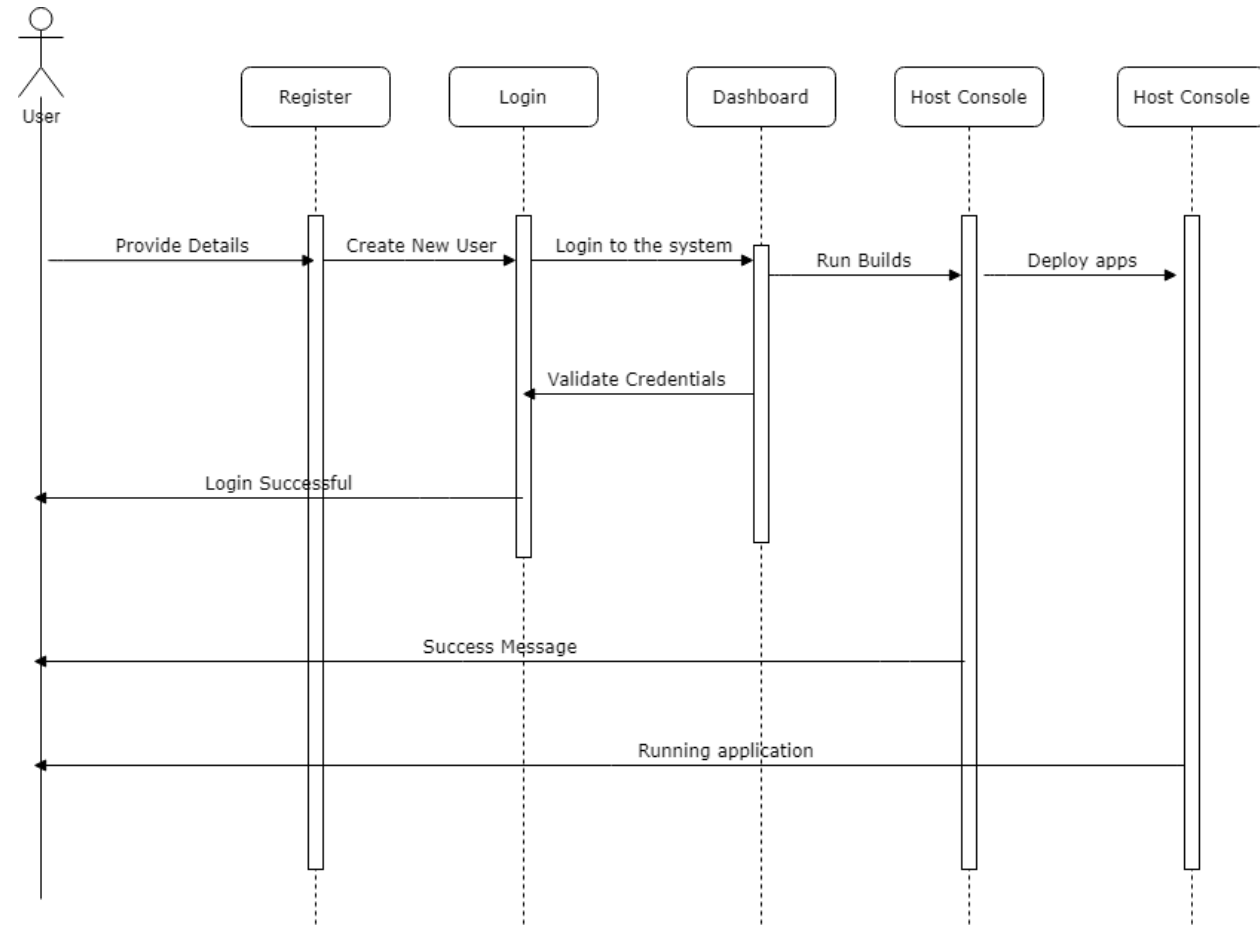
Activity Diagram



Class Diagram



Sequence Diagram



Thank You !