Last Name	First Name	GitHub User Name	Email Address	Prefered Role / Technical Area		
Tech	Berinike	BerinikeTech	niketech@web.de	Blockchain / Solidity		
Heil	Dominic	dominic-heil	d.heil@campus.tu-berlin.de	CI / CD - React - JS - (Python Backend)		
Steinkohl	Felix	steinkohl	steinkohl steinkohl@campus.tu-berlin.de CI / CD - Bac			
Stender	Nick	Floinko	stender@campus.tu-berlin.de	Backend		
Ehmendörfer	Christoph	krisutofu	christoph.ehmendoerfer@campus.tu-berlin.de	jump in (Backend / Frontend)		
Pilgrim	Jannis	NonFT	jannis.pilgrim@gmail.com	Database / Python		
Le	Ba Que	tuilagio	b.le@tu-berlin.de	Frontend (React) - Python backend		
Naumov	Nik	NickZecamp	nikum@live.se	JS, UI/UX		

Project Name	NFT the world!
Production system (if any)	https://amosproj.github.io/amos2021ws07-nft-development/
Test system (if any)	
rear eyetem (ii uniy)	
GitHub repository	https://github.com/amosproj/amos2021ws07-nft-development
GitHub kanban board (project)	https://github.com/amosproj/amos2021ws07-nft-development/projects/1
Table Table (cd:4-)	https://www.abiatirestande/lead/Destat/bOlysOTV/LICOF
Team T-shirt (white)	https://www.shirtinator.de/loadBasket/hQlmSTVUG0E
Team T-shirt (black)	https://www.shirtinator.de/loadBasket/hQlmSTVUG0E
Additional materials	
Zoom	https://tu-berlin.zoom.us/j/65882617955?pwd=WHJKV3InN20zNWUvbFMwbHZ0dnNyZz09
Jitsi (fallback)	https://meet.innocampus.tu-berlin.de/amos7
Happiness	https://happy-amos.appspot.com/Project?project=6300169943384064&course=6014071715397632
Slack	https://join.slack.com/t/campus-xuz7131/shared_invite/zt-xqnhb1i9-hzKoRSLynqkTrq_w8mNA

Goals	We want to learn about agile methods, good team work and practice team work. We want to build a cool open-source piece of software and "valuable" NFTs.
Meeting norms	We meet at least once a weak during the project.
	Please excuse yourself when you know that you'll be missing (like illness, important appointment) otherwise we want to not more than 15min late but on time in the average case. Single lapses or emergencies are permissible.
	We try to reach consensus where possible. As last resort we respect the majority rule for decisions which affect the whole team. Exceptional decisions for individual team members are possible for special circumstances.
Working norms	We participate fairly. It doesn't mean that everyone is equally fast or performing but that we are willing to invest time like others are.
	We individually contribute to the project to perform for our Credit Points. Work is distributed in team meetings together.
	Team work should be a safe space for everyone and allow for clarifying work or personal conflicts or appropriate criticism. You may contact Jule as person of trust for non-technical problems and as mediator for anonymous criticism.
	We value quality over quantity, maintainability over many features.
Coordination norms	No one is forced to do something s/he really doesn't want. Volunteers are considered first. If no one is willing to do a task and assignment is needed then democratic allocation.
	We let others say their (valid) opinion and avoid insults, harassment, discrimination due to individual properties like gender, color We don't expect each other to respond during weekends. We expect responses in 48h within week. We try to answer at least next day. We use team Channels on Slack for help.
Communication norms	We confess that nobody is perfect. We accept criticism of ourselves and permit others to correct us.
Consideration norms	We try to clear misunderstanding and create understanding instead of bashing others for disagreement. We don't want to be self-opinionated and give examples rather than just stating to be right.
Cost improvement source	There is continuous review of code and our wellbeing by using the "happyness index". We will use Scrum-relaed methods to track progress. Coding, Style and review rules and guidelines are respected for the reason of code health and team work. Syntax Formatters will be used if they are needed to ensure style guidelines. If someone can't finish story points over two weeks then we try to find a solution for improvement. Workload estimation isn't perfect. We will tell if work turns out to be more effort than estimated.
Cont. improvement norms	workload estimation isn't perfect, we will tell it work turns out to be more errort than estimated.
Rewards	People will be granted NFTs under applause. 2 Story Points = 1 NFT.
Sanctions	People who clearly violate rules multiple times should either write a poem, do extra work or obtain remaining User stories instead of free choice.
Signatures [optional picture]	I hereby declare to try and be willing to comply with our team contract [required]:
Unistoph Elmendorfe	
V U	Christoph Ehmendörfer
	Nick Stender
	Berinike Tech

SteFel	Felix Steinkohl
Our	Que
	Dominic Heil
	Jannis Pilgrim

#	Meeting Day	Comment	Coach	Product Owner	Software Developer	Release Manager	Scrum Master
1	2021-10-21		Yes	Christoph	Everyone else	N/A	Coach
2	2021-10-28		Yes	Nick	Everyone else	Christoph	Coach
3	2021-11-04		Yes	Nike	Everyone else	Dominic Paul Christian	Coach
4	2021-11-11		Yes	Dominic	Everyone else	Que	Coach
5	2021-11-18		Yes	Christoph	Everyone else	Nikita	Coach
6	2021-11-25		Yes	Nick	Everyone else	Jannis Max	Coach
7	2021-12-02	Mid-project release due	Yes	Christoph	Everyone else	Felix	Coach
8	2021-12-09			Nick	Everyone else	Nick	tbd
9	2021-12-16			Jannis	Everyone else	Berinike	tbd
10	2022-01-13		Yes	Jannis	Everyone else	Christoph	tbd
11	2022-01-20			Jannis	Everyone else	Dominic Paul Christian	tbd
12	2022-01-27			Felix	Everyone else	Que	tbd
13	2022-02-03		Yes	Felix	Everyone else	Nikita	tbd
14	2022-02-10	Demo day / final release		Felix	Everyone else	Jannis Max	tbd
15	2022-02-17	Project retrospective due		Felix	Everyone else	Felix	tbd

Product Vision	Project Mission
NFTs allow for accessible decentralized market power where people can create, collect and trade virtually represented things. NTFs therefore have potential for the worldwide community to empower more people to produce and supply, without profit-making intermediaries. A democratic market would help to reduce big social problems, tremendous inequality and intransparency which arises out of concentrated power. Entities also have the possibility to create their own secondary market to sell own products to enable closer customer relationships. NFTs help simple creators to earn from their work; it improves transparency, trust and can help legal enforcement, without the need for payment processors and banks.	Our project can contribute to the vision by creating a reusable example application which generates valid NFTs and automatizes important steps in order to lower the usability hurdles and improve crucial adoption. As an open source project, the result can be used by others, also for small to medium sized companies, to easily create NFT solutions for their own marketing strategies, sales management or online campaigns for several non- or commercial purposes. A private secondary market mechanism can be supported for a deeper relationship of customers to the owning seller.
Public blockchains with transparent transactions could help to recognize illicit and criminal money flows like corruption and tax robbery schemes.	
Additionally, NFT markets allow for new products and business models like crypto games or crypto funding and can leverage several benefits of the blockchain technology to reduce (transaction and marketing) costs. It allows for implementing security/protection goals that are useful for practically every digital marketing.	

Term	Definition
Non-fungible Tokens (NFT)	Digital assignment of an owner (wallet) to digitally represented asset, stored in a blockchain. It is an entitlement to sell or use certain asset. It differs from usual crypto currency that every NFT has an individual value.
fungible token	Indicator of financial asset which is used to buy goods/services and is fully interchangeable with other fungible tokens of the same kind.
wallet	A digital depot for crypto-asset, NFTs and other crypto currency.
drop	An event where a collection of NFTs first becomes buyable and delivered to buyers.
minting	Process of turning digital asset into a valid valuable NFT.
blockchain	A cryptographically secured append-only database whose history is immutable. This makes it perfect for high-security applications like finance.
Ethereum	Company and the eponymous popular blockchain. It supports NFTs and (fungible) crypto currency.
ETH	Cryptocurrency used with Ethereum
Kovan	A Ethereum testnet where ETH are easy and free to get online, but in limited rate of course.
Mainnet	A production blockchain that is used for valuable transactions.
Testnet	A blockchain for testing purposes. Content and currency in the test net do not have real value.
announcement	A News section with title and content which is displayed to visitors of the site.
faucet	Source for obtaining crypto currency, particularly for test currency like the one that is used in Kovan.

#	Theme Goal	Feature Name	Est. Size (Feature)	Est. Size (Sprint)	Real Size (Feature)	Real Size (Sprint)	Burn- Down
0	course organization		()	(-1	((-1)	
1	setup project & team work						
	getting to know th	ne project vision, mission and work-ready		1		1	
		hello world project	1		1		
2	requirements engineering	& tech stack					
	knowing the com	ponents of the application		37		24	
		requirements engineering website	5		3		
		choose database	3		1		
		slack channels	1		1		
		frontend technology stack	2		3		
		backend technology stack	3		5		
		smart contract requirements	5		3		
		blockchain technology stack	5		3		
		Frontend Mockup for Join Drop	5		5		
		getting infrastructure	3		x		
		endpoint definition for backend	5		х		
3	first use of technology						
		, wallet creation, blockchain setup, frontend					
	running a mocku	o with sign in		38		32	
		Website Signup (Backend)	5		8		
		Website Signup (Frontend)	0		2		
		Github Workflow for Backend Linting	2		3		
		Hello World Smart Contract	3		3		
		Design Team Logo	?		?		
		Wallet Creation For Team Members	1		1		
		Frontend Mockup for announcements	5		5		
		Frontend Mockup for NFT market place	5		5		
		deploy server	5		x		
		getting infrastructure	3		x		
		Wallet Connection to Account (frontend)	3		X		
		Wallet Connection to Account (backend)	3		5		
		User Information in Database	3		?		
4	Fundamental Smart Contr	act and User Logic					
	announcement m	nechanism, Drop mechanism in smart contract					
	enhanced user m	nanagement		42		19	
		Drop Time Functionality in smart contracts	5		?		
		random NFT assignment smart contract	8		8		
		Nuremburg NFT image creation	3		5		
		team assignment of a user (backend)	5		3		

#	Theme	Goal	Feature Name	Est. Size (Feature)	Est. Size (Sprint)	Real Size (Feature)	Real Size (Sprint)	Burn- Down
			team assignment of a user (frontend)	5	(органу	?	(0)	
			getting infrastructure	3		3		
			Deploy Server	5		x		
			announcement database backend endpoint	8		x		
5	Website	e design						
			nts, smart contract usability enhancements mentation part 1		54		3	
			NFT purchase limit	3		?		
			Branding & Color Scheme	3		?		
			Github workflow for automatically deployed testing	13				
			Human-readable Drop Time format	2		x		
			Removal of sensitive data from Github	3		3		
			Deploy Server	5		x		
			Wallet Connection to Account (frontend)	3		?		
			Design implementation landing page	3		x		
			Design implementation mockup password/login pages	3		?		
			Design implementation for page header and footer	3		?		
			announcement database backend endpoint	8		?		
			announcement creation, modification, display in frontend	5		x		
6	Wallet C	Connection & A	nnouncements					
			ployment and testing for cloud functions, smart contract requirements mentation, finish wallet connection & announcements					
7	Reachin	ng the Drop						
		-	nplementation, user purchases, admin triggered drop					

Sprint	Status	Source	Impediment	Resolution
1	Resolved	Nike	Communication - feeling of people pretending to be "superior"	Democratic voting before deciding things Slack: Poll Function Zoom: Reactions
1	Resolved	Nick N	Chaotic in general	Getting used to the process with more time If needed: coaching sessions with Jule
1	In-work	Nick S	Work quite late - finish last minute	Try to start work already at the beginning of the sprint Polls to ask for problems
1	Resolved	Nick S	Double PO role - hard to communicate; no close collaboration	try to improve communication by having meetings previous to talking with industry partner
1	Resolved	Christoph	Not too much experience in communication within teams/ groups	Give clear instructions to other team mates on how you would like the communication - be on time for the meetings
1	Resolved	Dominic	Unstructured Meetings	Prepare Agenda for the meeting - send it out beforehand have a moderator for the meeting
1	Resolved	Dominic	Unnecessary comments during meetings	Focus on essential topics and try to only talk little about "personal issues" to stay in the timeframe
2	Resolved	Nike	Confusion who needs to write features	Next PO has to write new user stories Only POs write user stories and have an extra slack channel with ideas
2	Resolved	Nick N	Information about project status / vision of project and customer opinions	Summary of Industry meeting by PO> maybe new slack channel?
2	Resolved	Nick S / Felix	Who is responsible for Deliverables?	Second Board on github for project internal things
2	Resolved	Dominic	Everything in general channel	Create new channels in slack for organisation
3	In-work	Dominic / Christoph	Pull requests all over the place - what should be happening in the review phase? How many people?	Creation of Slack Channel Specify guidelines and agree on it democratically
4	In-work	Nike	Review Comments were unclear	Put into guidelines - clear suggestions for the code review
4	In-work	Christoph/Felix	Improvement of branch naming / management	Suggestions and democratic vote on branch structure

#	Theme	Goal	Feature Name	Est. Size (Feature)	Est. Size (Sprint)	Real Size (Feature)	Real Size (Sprint)	Burn- Down

ŧ	Feature Definition of Done	Sprint Release Definition of Done	Project Release Definition of Done
1	The code is reviewed by at least two people	Release candidate was tagged	User documentation available
2	Every larger component/object/class has a comment/JDoc. Small functions should either be self-explanatory based on the function name or also be commented	Tests for the release candidate were compiled, build and run	Tests for all application critical functions
3	Feature works on the machine of a different team member	Release candidate is deployed to operations environment	
4	Code is in the main branch	Release is tagged with current sprint number	
5	GitHub Cl and checks succeed	Documentation available	
6	[Code coverage, testing?]		

Туре	Link / reference						
Requirements Smart Contract	https://docs.google.com/document/d/1S7tHRaEUoF9FJN_28D3lvtelquaD9fRatbvqKY1aE/edit						
Software Architecture	https://docs.google.com/document/d/1ta25Bhs-exHCyM281CE_YUDq3FhjdktO6-a7hyEk_kM/edit#heading=h.mpdikrgqtfxb						
Server Architecture	https://drive.google.com/drive/u/0/folders/1hSw9R6SqZH5jMIMtA_EySsIABxfzBTdA						
Website requirements	https://docs.google.com/document/d/1XSkG0V8GKgFLEi4khz0xZapYmKVoykUJ4RExn-6pNFQ						
Techstack Frontend	https://docs.google.com/document/d/14XCqHOpMnODqBclcaX0ZpxStfuG5Y1G1mN6UK5PzwNc						
Techstack Backend	https://docs.google.com/document/d/1Yrlt-yy85KF359LNd6y0RSpUN8MBhCDcpyzC-geJdtc/edit?usp=sharing						
API endpoints for backend	https://github.com/amosproj/amos2021ws07-nft-development/issues/9						
Deployment Tech	https://docs.google.com/document/d/1GHmuxU5iK8VqlVWdzi4NaaRJXl9t5dRaCVvw-j-am8U/edit?usp=sharing						
Mockups	https://www.figma.com/file/8kdPSVa0kG9BI5xVdLpydr/Untitled?node-id=0%3A1						
Review Guidelines	https://docs.google.com/document/d/10FvJq6eY0aQil-MBv8-Md7d4lQxHsAvYcXz1HI5f2cY/edit?usp=sharing						

١	Context	Name	Version License	Comment
1	Frontend framework	React	17.0.2 MIT	
2	Prontend library	Material UI (Core)	4.12.3 MIT	
3	Frontend library	Material UI Icons	4.11.2 Apache License 2.	0
4	Frontend library	ESLint	7.32.0 MIT	
5	Database	MariaDB	10.6.3 GPL, LGPL	Because inclusion in appwrite, Similarity to PostgresDB
6	Backend Framework	Appwrite	0.11.4 MIT	Includes MariaDB
7	Backend Language	Python	3.9 PSF, BSD	
8	Map tiles	OpenStreetMap	2.0 CC BY-SA	https://www.openstreetmap.org/copyright

Last Name	First Name				
Tech	Berinike		TUIV	TUIVI	
Heil	Dominic		0!	0!	
Steinkohl	Felix	x	U:	U:	
Stender	Nick				
Ehmendörfer	Christoph		0	No size	
Pilgrim	Jannis	X	1	Trivial size	
Le	Ba Que		2	Small size	
Naumov	Nik		3	Medium size	
			5	Large size	
			8	Very large size	
			13	Too large (size)	