

Date	Start Time (24h)	End Time (24h)	Duration (hours)	Week Subtotal	Notes
Week 1	5/1	5/7			
2020-05-01	1:30	2:30	1		Review, analyze, research, and discuss usability and security of OTP mechanism
2020-05-02	15:30	16:30	1		Review and analyze of TOTP source code updates
2020-05-02	20:30	2:30	6		ONE Wallet technical document write up; Further paper+code review and threat analysis on proof material and operation confirmation; Preparation on meeting with author
2020-05-03	7:00	9:30	2.5		Meeting with author; Post-meeting summary, write-up, and further research on hashchain, authenticator, hotp mode, and possibilities for speeding things up
2020-05-06	21:30	0:00	2.5		Research on HOTP and security issues; Polishing ONE Wallet wiki. Drafting technical sections
2020-05-07	22:00	0:00	2	15	Modelling possible solutions for OTP security weaknesses; Rewriting ONE Wallet overview and background using simpler but more precise languages; Polishing technical sections
Week 2	5/8	5/14			
2020-05-10	19:30	22:30	3		Analyze theoretical feasibility and limitations of OTP-based security models; Narrow down solution search space; Write up Client components in ONE Wallet wiki
2020-05-11	20:00	0:00	4		Sketch and analyze solutions for OTP security weakness (to brute-force attack); Writeup on Enhanced Security Mode, possible use of HOTP, Authenticator components; Writeup Harmony-SmartOTP test-code documentations and README; Github repo reorganization;
2020-05-13	20:00	23:00	3	10	Refine Client & Context sections; Smart Contract section introduction
Week 3	5/15	5/21			
2020-05-15	20:00	23:00	3		Smart contract section: Proposal for Basic Wallet and Guardian and how they can be made progressively secure
2020-05-16	1:00	5:00	4		Proposal of new mechanisms (secure and composable); Security Analysis; Smart contract section complete proposal; Refinement
2020-05-16	16:00	20:30	4.5		Refine and simplify Smart Contract sections; Allow users to adjust limits; Unify daily spending limit and transfer limit; Reorganizing design documents
2020-05-21	19:30	23:00	3.5	15	Design safe transfer and operation initiation mechanisms; Identify and develop key differences to other mechanisms (private-key, passwords); Related to use cases; Identify open problems
Week 4	5/22	5/28			
2020-05-25	21:00	0:00	3		Code refactoring - proper webpack config, eslint setup, yarn packages, etc.
2020-05-26	0:00	4:00	4		(continue from above) fixed overflow issue with smart contract; fixed bugs in tests (previously set to wrong condition and failing occasionally)
2020-05-27	0:00	4:00	4		ONE Wallet Wiki Review - first batch reply; Refactoring web client and rewrote all JS in ES2020 and modern JS
2020-05-28	0:00	4:00	4	15	Refactoring everything into React Hook and modern state management; Major cleanup in code; Sync with Ivan and Quoc (evening)
			Total	55	