

Stand-Up Meetings

Date	Handle	Task Done	To-Do
27/09/19 JC Tut	cba2	Meeting 1	Research languages to program the client with
	hme3	Meeting 1	Learn rules of bridge, whist + general trick-taking games
	sjs31	Meeting 1	Determine best method of intra-group communication Set up Trello
	rfh8	Meeting 1	Research SCRUM
	cdo2	Meeting 1	Liaise with supergroup Brainstorm possible networking protocols
2/10/19 JC Tut	cba2	Meeting 2 Determined to be SCRUM master (in charge of planning sprints)	Drafting basic functionality of the client (User Interface) For Report 1: User stories
	hme3	Meeting 2	Create Google Drive, write up minutes of each meeting For Report 1: User stories Product backlog Burndown chart
	sjs31	Meeting 2	Create trello board, populate with tasks And assign tasks to group members (colour-coordinated) For Report 1: User stories Writeup of big overview Comparison of communication technologies
	rfh8	Meeting 2	For Report 1: Description of SCRUM Determining sprint lengths
	cdo2	Meeting 2	Liaising with supergroup regarding networking protocols to be used. JSON will be used (as opposed to RECYCLE) to determine game rules For Report 1:

			Working on JSON structure to be used by all members of the supergroup
7/10/19 GFB JH	cba2	User stories	Read paper on context-free grammars Plan overview for report
	hme3	User stories	Read paper on context-free grammars Update burndown chart to have potential tasks for the project for report
	sjs31	Notes taken on overview of interaction technologies	Read paper on context-free grammars Plan out pros/cons for report
	rfh8	Research on SCRUM collated from lecture material and external sources	Read paper on context-free grammars Collect citations for report, write first draft of SCRUM section
	cdo2	Read papers on networking protocols to prepare for supergroup meeting	Read paper on context-free grammars Supergroup meeting
8/10/19 JH Lab	cba2	Product Backlog Plan Overview	Sprint backlog Prepare notes for next meeting Write plan overview section of report Design Sprint plan for SCRUM
	hme3	Program product backlog spreadsheet Update user stories	Write first draft of report section
	sjs31	Write pros/cons for communication technologies	Edits on pros/cons for coherency and clarity “Big picture” description of game functionality intended for final product
	rfh8	Finalized SCRUM file	Create collaborative document on Overleaf
	cdo2	Research on discovery protocol	Decide on how to express
9/10/19 JC Lab	cba2	Spring backlog plan	Personal report
	hme3	First draft of report section written Graphics generated for report to show burndown chart functionality and sprint backlog tasks	Revise report section Personal report
	sjs31	Report section finalized	Personal report

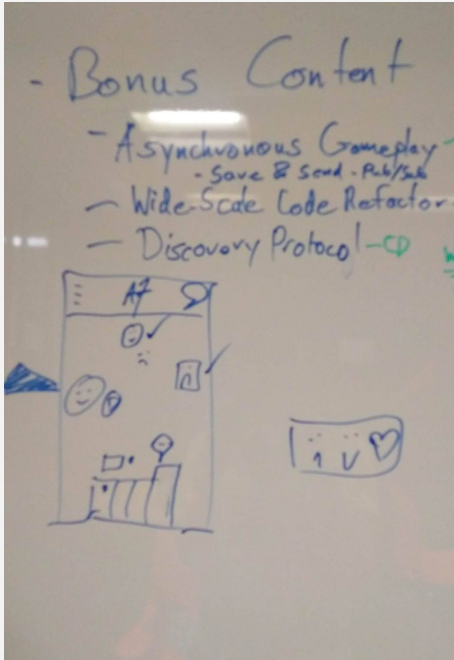
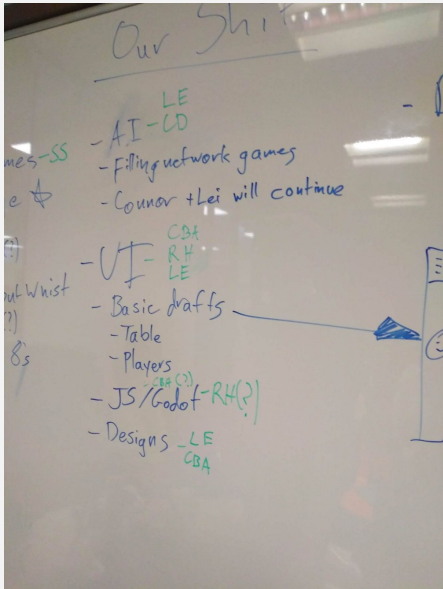
	rfh8	Created overleaf document so we could collaborate on our report using LaTeX	Personal report
	cdo2	Wrote up description of pros/cons for the networking framework we'll use + justified why	Revise draft Personal report
10/10/19 JC Lab	cba2	Personal report + Submit	Arranged next meeting to be 22nd of October -- after first deadlines for HCI, Data Encoding, Databases, Operating Systems and Logic/Reasoning
	hme3	Personal report + Submit	Arranged next meeting to be 22nd of October -- after first deadlines for HCI, Data Encoding, Databases, Operating Systems and Logic/Reasoning
	sjs31	Personal report + Submit	Arranged next meeting to be 22nd of October -- after first deadlines for HCI, Data Encoding, Databases, Operating Systems and Logic/Reasoning
	rfh8	Personal report + Submit	Arranged next meeting to be 22nd of October -- after first deadlines for HCI, Data Encoding, Databases, Operating Systems and Logic/Reasoning
	cdo2	Personal report + Submit	Arranged next meeting to be 22nd of October -- after first deadlines for HCI, Data Encoding, Databases, Operating Systems and Logic/Reasoning
22/10/19 Lei's House	cba2	Agreed to change stand-up meetings to be between 6-7pm every day to ensure consistency	Hard-coding whist
	hme3	Agreed to change stand-up meetings to be between 6-7pm every day to ensure consistency	Research trick-taking games
	sjs31	Agreed to change stand-up meetings to be between 6-7pm every day to ensure consistency Opened new branch for RuleParser (for game rules)	Plan out game framework
	rfh8	Agreed to change stand-up meetings to be between 6-7pm every day to ensure consistency	Plan out card representation in code using OOP principles Aiming for modularity, extensibility (especially because it will be useful for next semester)

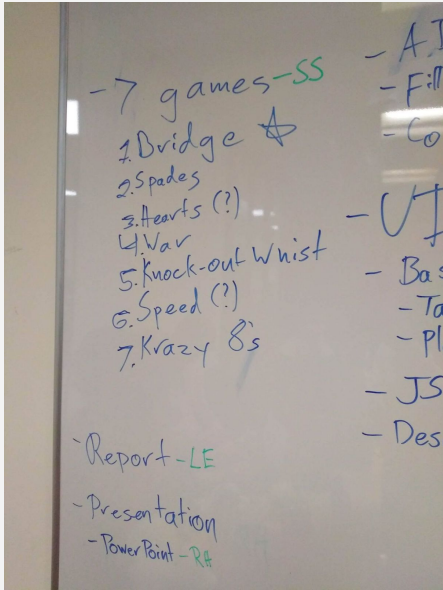
23/10/19	cba2	Started paging system in-game to allow the user to view different game states	
	hme3	Research on trick-taking games and their rules	Decide which is the most simple to implement
	sjs31	Skeleton of game framework created Game/Card/Player classes created	Update game framework
	rfh8	Card class, Deck class created Cards can be dealt to player's hands Suits have been organized to be stored by their power to make sorting later much easier.	Create shuffle
23/10/19	cba2		Write JUnit tests
	hme3	Compiled a list of trick-taking games that would be easy to implement programmatically (as a starting point)	Fix product backlog + user stories
	sjs2	Shuffle method not necessarily finished	Finish shuffle method
23/10/19	sjs2	Finished shuffle method with rfh8	Continued work on RuleParser branch
	rfh8	Finished shuffle method with sjs2	Implement general JSON parser Implement Game Saving functionality by designing game states to be saved in JSON format
30/10/19	-	General progress update - no tasks have been completed due to other deadlines but people are still working incrementally on tasks	General discussion on how to structure JSON schema to represent trick-taking card games
05/11/19	cdo2	Wrote notes on prime order cyclic groups for the init(k) function Writing SecureSpades in java Started writing an interface for the protocol (This will mean that different implementation can be written that use different encryption algorithms and networking protocols if super group changes their mind)	Decide on standard encryption algorithm in super group meeting tomorrow (Hoping for AES as it is modern)
	sjs31	More work done on game framework	Continue

	hme3	Began work on wiki content	Continue
	cba2	Began work on wiki structure	Continue
	cdo2	Wrote the init function but I don't think if using a predefined algorithm that it is actually needed Wrote the keygen function Created a setup type	Write GKeyGen and DeckGen which will involve writing code to represent the deck or using prewritten code
08/11/19	hme3	Commented/reorganized some code to make it more readable	Create documentation for program so far
	cba2	Created templates in the wiki	Create documentation for program so far
	sjs31	Continued work on game framework	Finish framework
10/11/19 JC Lab	cdo2	Wrote a discovery protocol using udp multicast and TCP to gather the players to begin a game Included JUnit tests	Write up the details of the protocol for the other supergroups to implement it as well
13/11/19 JC Lab	rfh8	Implemented remote branch tracking Finished shuffle function Merged my branch to master Small tests on deck Implemented remote branch tracking	Incorporate rules passed by JSON parser with back-end architecture in order to implement games
27/11/19 JC Lab	hme3	Meeting	Finalizing report
	cba2	Meeting	Tackling User Interface + Game Paging System
	sjs31	Meeting	Implementing Whist functionality into client Implement Hearts + a couple other games
	cdo2	Meeting	Programming trick taking using network -- to send moves and receive moves
	rfh8	Meeting	Edit the parser to read the cards and create a map of any that have a point value associated with them Compose JSON file to represent Hearts
29/11/19 JC Lab	hme3	Submit MVP hand-in + work on report together	Report section: Technologies used to communicate, "big picture" report section, "intra-group communication" section SCRUM use
	cba2	Submit MVP hand-in	Report section: Continuous integration, SCRUM sections of appendix

	sjs31	Submit MVP hand-in Implemented hearts	Report section: Game implementation/design description, playable games
	cdo2	Submit MVP hand-in	Report section: Discovery protocol, supergroup interaction, project specifications, testing
	rfh8	Submit MVP hand-in	Report section: Product functionality and design, card representation, description of Fischer-Yates shuffle, testing screenshots in appendix
1/15/20 Call	hme3	Review supervisor feedback: <ul style="list-style-type: none"> Implement Continuous Integration Address communication problems in supergroup Discuss new spec: <ul style="list-style-type: none"> Decide UX. Ionic, react could be used Think of "new feature" to add 	Update user stories/project requirements Look into technologies that could be used for the UX Carry out heuristic evaluation Decide what to use for UX (technologies/libraries) by next week
	cba2		Create more general SCRUM plan Add more JUnit tests
	sjs31		Look into implementing C/I and making Gantt charts
	cdo2		Look into pathfinding algorithms Implement continuous integration
	rfh8		Learn React / NodeJS
1/30/20 Call	hme3	Set up meeting with Supervisor	Meet tomorrow to walk through dependencies
	cba2	Set up meeting with Supervisor	Meet tomorrow to walk through dependencies
	sjs31	Set up meeting with Supervisor	Meet tomorrow to walk through dependencies
	cdo2	Set up meeting with Supervisor	Setting up Maven + dependencies Meet tomorrow to walk through dependencies
	rfh8	Set up meeting with Supervisor	Meet tomorrow to walk through dependencies
1/31/20	hme3	Walk through dependencies / how to use Maven in the context of our project	Other deadlines, but work on SCRUM plan
	cba2	Walk through dependencies / how to use Maven in the context of our project	Other deadlines, but brainstorm ideas for new content
	sjs31	Walk through dependencies / how to use Maven in the context of our	Other deadlines, but think about how to implement continuous integration

		project	
	cdo2	Teach others how to use Maven	Other deadlines, explore AI libraries to use
	rfh8	Walk through dependencies / how to use Maven in the context of our project	Other deadlines, but learn React in the meantime
2/10/20	hme3	Discuss Special feature <ul style="list-style-type: none"> • “Ultimate hearts” • Asynchronous playing • Customizable interface • Interface that changes based on the game 	Create content inventory for UX Draft designs for the design using mobile-first approach
	cba2		Re-create SCRUM plan keeping deadlines and people’s schedules in mind
	sjs31	Outline major deadlines and how they will affect us <ul style="list-style-type: none"> • CS3301 - 29 Feb (cba2, hme3, sjs31, cdo2 affected) 	Look into adding bidding functionality to the game -- will involve restructuring the game
	cdo2	<ul style="list-style-type: none"> • CS3105 - 13 Mar (cdo2, cba2, hme3 affected) • CS3102 - 28 Feb, 9 Apr (sjs31, cba2 affected) • PY3200 - 8 Mar (rfh8 affected) 	Continue thinking about AI, also think about networking that will need to be implemented to allow AIs to function
	rfh8	<u>Next meeting after CS3301 deadline</u>	Learn React
2/15/20	hme3	Sub-group meeting to discuss UX appearance/layout	-
	sjs31		-
	cdo2	Potential technologies to use: <ul style="list-style-type: none"> - LeanUX -- uses AGILE for UX design - Aim to use mobile-first design 	-

3/2/20	hme3		Draft report structure, aim to finish after CS3105 deadline
	cba2		Design general game appearance/potential layout
	sjs31		Design card graphics for game, aim to finish after CS3105 deadline
	cdo2		Look into technologies to do asynchronous gameplay -- talk to rfh8 to see how to extend current game save technology to implement it
	rfh8		Fix Discovery protocol, aim to finish after CS3105 deadline
			Work on asynchronous gameplay with sjs31, aim to get a head start on it after PY3200

			
3/17/20	hme3	Report "table of contents" generated with general notes for each section for progress report	<p>Make COVID-19 Plan with rfh8</p> <p>Fill out doodle poll to check availability for supervisor video calls</p> <p>Set up project on local machine</p>
	cba2	-	<p>Fill out doodle poll to check availability for supervisor video calls</p> <p>Set up project on local machine</p>
	sjs31	<p>Potential ways to implement asynchronous playing:</p> <ul style="list-style-type: none"> - Java - Python - Go <p>Go seems like the best option because it's used by many big companies to produce middleware and it's specialized for that purpose</p>	<p>Fill out doodle poll to check availability for supervisor video calls</p> <p>Learn Go to implement asynchronous playing using Pub/Sub system</p> <p>Set up project on local machine</p>
	cdo2	-	<p>Fill out doodle poll to check availability</p> <p>Set up project on local machine</p>
	rfh8	-	<p>Make COVID-19 Plan with hme3</p> <p>Set up project on local machine</p>
3 weeks wasted due to deadlines being moved, Pandemic-forced travel from St. St Andrews and setting up the project remotely/on home machines/installing dependencies			
4/16/20	hme3	<p>Revise original SCRUM plan to accommodate for the fact that our deadline is in 2 weeks.</p> <p>Rfh8 decided not to learn react -- will</p>	<p>Make to-do list for AI implementation and get to work! Set up a call with cdo2 to get a run-down on what they learned and how to move forward with that knowledge on the project</p>

		instead use PyGames.	Make report skeleton + populate with notes to flesh out later
	cba2	hme3/rfh8 made the COVID-19 plan.	Make to-do list for Documentation and Testing
	sjs31	Set deadlines for: <ul style="list-style-type: none"> • Design/UX Drafts (hme3) • Learning PyGames(rfh8) • Game saving changes (rfh8) • Implementing bridge (sjs31) • Fix networking (cdo2) • Research AI (cba2) 	Make to-do list for Bridge functionality + bidding functionality
	cdo2	Sjs31 finished auction and non-auction bidding	Make to-do list to fix networking issues
	rfh8	Cdo2 changed text interface to take JSON messages as string, added a protocol to enable the functionality. Protocol is intended to allow the program's front-end to connect to the backend Both merged into master branch	Make to-do list for UX including graphics, functionality, etc.
4/20/20	hme3	Report skeleton made, parts designated based on who made what, Overleaf document made, general notes being added to the sections	Implement AI Add notes to report sections
	cba2	JUnit tests being made on separate branch with documentation to match	Continue doing JUnit tests Add notes to report sections
	sjs31	Finished bridge functionality, now implementing pub/sub asynchronous playing	Finish async playing feature Add notes to report sections
	cdo2	Fixed networking Example UI merged to master branch with mediating interface to allow front/back end communication without code overlap	Add notes to report sections
	rfh8	Finish save functionality Researched PyGames + how to implement it	Start work on GUI Add notes to report sections
4/23/20	hme3	Continue implementing AI	Continue implementing AI by extending player class
	cba2	Started writing report section JUnit testing branch still being worked	Make graphics for game - 52 cards + 2 jokers

		on	<ul style="list-style-type: none"> - Splash screen - 'Table top' background
	sjs31	Finished pub/sub system Added files required for continuous integration to work with VS code	Integrate Bridge
	cdo2	Restructured program to remove static elements. Restructured Player class so AI functionality can be easily implemented.	Fix networking, add discovery (UDP multicast) Ensure gameplay works over network
	rfh8	Created game HUD	Develop framework for game systems Adding start menus Adding end screens
4/26/20	hme3		Compile information about project structure to do design/implementation section of report, FinalizeUX/GUI with cdo2
	cba2		Work on Testing section of report
	sjs31		Finish Pub-sub
	cdo2	Networking now works with discovery via udp multicast Gameplay also works over the network Fixed some issues with getCardValue() not being quite the same as supergroup communication.	Fix networking
	rfh8	Implemented GUI	FinalizeUX/GUI with hme3
4/27/20	hme3	Compiled information about project structure to do design/implementation section of report, Finalized UX/GUI with cdo2	work on GUI with hme3
	cba2	Testing section of report	Finish Unit tests
	sjs31	Pub-sub	Implement Game Store, finishing Bridge
	cdo2	Fixed networking	work on UI backend
	rfh8	Finalized UX/GUI with hme3	Add music to GUI, working on GUI with hme3
4/28/20	hme3		Edit Report
	cba2		Unit Tests
	sjs31	Implemented Game Store	Finish Bridge

	cdo2		UI back end
	rfh8	Added music to GUI	GUI improvements
4/29/20	hme3		Editing Report
	cba2	Finished all but two classes	Finish unit tests
	sjs31	Finished Bridge	Save functionality
	cdo2	UI back end	AI vs AI games
	rfh8		GUI Improvements
4/30/20	hme3		Proofread the report
	cba2	Finished unit tests	Corrections on unit tests
	sjs31		Finish Save functionality Work on GUI integration with backend
	cdo2	AI vs AI games	
	rfh8	GUI Improvements	
5/1/20	hme3	Last minute edits	Personal Statement
	cba2	Fixed repo issue	Personal Statement, merge tests into master
	sjs31	Finished Save functionality Worked on GUI integration with backend	Debugging UI / Async / merging everything together Personal Statement
	cdo2		
	rfh8		