Christopher Holder
Derek Lau
Saul Paredes
Andrew Keller
Shakil Usman
David Scher-Arazi
Milestone 5

a) For this final period we changed the focus to the user interaction with the application in android. So the user stories implemented for this section where:

1. "The user can register to the application. "

2. "The user can login into the application."

3. "The user has access to a newly created Ethereum wallet in the Rinkeby network.(A test network for Ethereum development.)"

4. "The user can see a feed with all the lotteries created by other players and information about them."

5. "The user can create a "Lottery" .

6. "The user can set the parameters of a lottery like amount of players and minimum bets."

7. "The user can access his/her profile. "

8."The user can see his available ether."

b) For this section we rotated. Shakil Usman and Andrew Keller worked on the backend. Saul Paredes and Derek Lau worked on the android interface. Christopher Holder and David Scher-Arazi wrote the ethereum smart contracts.

c)

Shakil Usman and Andrew Keller, re-implemented the back-end functionality from Java's Web3j to Python's Web3py (more details on this below). This last implied a full re-envisioning of our back-end architecture and the way we handle account creation and smart contract handling . They also used flask to access POSTs and send JSONs for the interaction between server and the client(Android app) .

Shakil also configure a server to do authentication and generate Ethereum wallets when a client registers to the app.
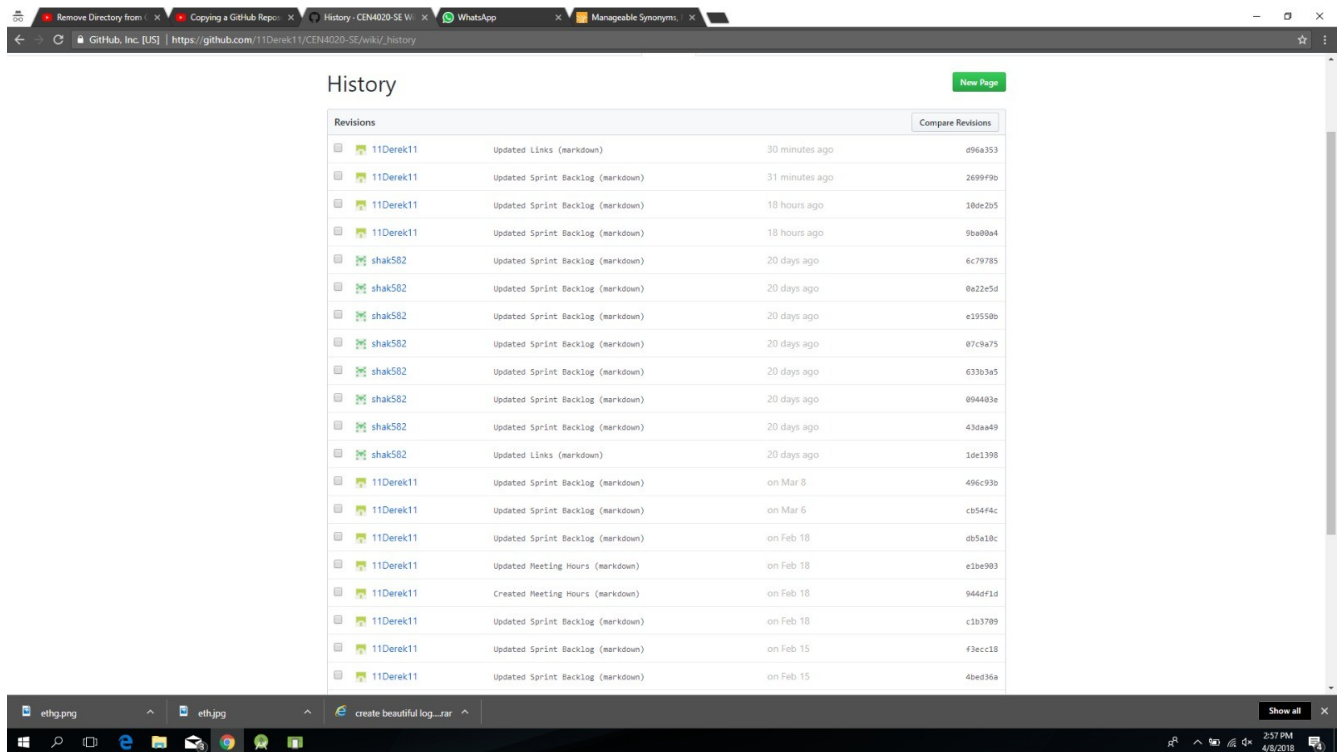
Christopher Holder and David Scher-Arazi, created a generalized version of the original CoinFlip.sol smart contracts,which only supported 2 players, to a version Random.sol which allows for almost an arbitrary amount of players. This also provides the feature of moving the funds to the winner as soon as the result is verified.

Saul Paredes worked on the android client. This includes the interaction between the server and the client(from the client perspective). This required the usage of the volley libraries in android as wrappers to handle HTTP requests for the interaction with POSTs. He also implemented the feed and the profile. Derek Lau worked in the UI for the login.

d) Yes, we made plenty of changes. We actually re-wrote the back-end from Java to Python. The reason is we realized that if we had started the project using the python version of web3py we could have added many other features in half the time it took us. Additionally, the main interaction between the client and the server relies on sending JSONs back and forth through the use of the volley library and flask.

e) Making the decision to change the project architecture was not easy. But we thought it was worth it. As some key features for the network interaction were trivial to implement in the python libraries, and were also asynchronous, which was perfect for our implementation. Also the support to interact with JSON files through python and flask is very feasible. Additionally, SQLAlchemy and ORM also allow us to .

f)

g) commit 0c5aefe492f637097a2d060f9024c6375d6ba9d2
Author: Saul Paredes <sparedesq@gmail.com>
Date: Sun Apr 8 13:08:04 2018 -0400

   added gradle files so it is plug and play

commit 765a7dd5de1d3f75edc1f1ac3134d6409b4f9982
Author: Saul Paredes <sparedesq@gmail.com>
Date: Sun Apr 8 13:06:33 2018 -0400

   merged login

commit cc7d7bc4eb736ededc68777796b4861255d8fed3
Merge: 26d4069 29bd9d6
Author: Saul Paredes <sparedesq@gmail.com>
Date: Sun Apr 8 12:56:00 2018 -0400

   Merge remote-tracking branch 'origin/master'

commit 29bd9d665ee8746ffd84919fdd8bb373e6533a4c
Author: Derek <dereklaumann@hotmail.com>
Date: Sun Apr 8 12:49:11 2018 -0400

   Missing files

commit 9f023118bf686ead1e10a6c6f487e6a21fae032f
Author: shak582 <shak582@hotmail.com>
Date: Sun Apr 8 12:18:24 2018 -0400

   fully working backend

commit 87cfe47dcd348f2c4a5f3ca596c8825d56091acd
Author: shak582 <shak582@hotmail.com>
Date: Sun Apr 8 12:17:31 2018 -0400

    full working backend

commit 29c42e029448230943be23700c1c506b1f2cc9e6
Author: Derek <dereklaumann@hotmail.com>
Date: Sun Apr 8 12:04:35 2018 -0400

    Missing pngs

commit 26d40690510daca891e82203380174c3ba2e49fa
Author: Saul Paredes <sparedesq@gmail.com>
Date: Sun Apr 8 11:39:58 2018 -0400

    added resources to vcs

commit da4b966dbfc8f7fbdfa855f2f9b06c4846a5ea32
Author: 11Derek11 <dereklaumann@hotmail.com>
Date: Sun Apr 8 03:48:01 2018 -0400

    Delete MainActivity.java

commit 38ee3ba9ced6aa5504811c0945a88249101b56a5
Author: 11Derek11 <dereklaumann@hotmail.com>
Date: Sun Apr 8 03:47:25 2018 -0400

    Delete ExampleInstrumentedTest.java

commit 1d4faee780957ba44a186012a3d68ba4e915318a
Author: 11Derek11 <dereklaumann@hotmail.com>
Date: Sun Apr 8 03:21:17 2018 -0400

    Delete AndroidManifest.xml

commit a170ba432e0a8e2cec61da395318cf92dc18db2f
Author: 11Derek11 <dereklaumann@hotmail.com>
Date: Sun Apr 8 03:20:35 2018 -0400

    Delete ExampleUnitTest.java

commit c1094c0cc08b98f30389e4ef6f5ede6e462c51bb
Author: 11Derek11 <dereklaumann@hotmail.com>
Date: Sun Apr 8 03:20:08 2018 -0400

    Delete .gitignore

commit a56f336246de7a11b6ae04ba0226e87b0dd75974
Author: 11Derek11 <dereklaumann@hotmail.com>
Date: Sun Apr 8 03:19:56 2018 -0400

    Delete build.gradle

commit 341ccf3f344a433f0a5c9b1438121738b83659c4
Author: 11Derek11 <dereklaumann@hotmail.com>
Date: Sun Apr 8 03:19:46 2018 -0400

    Delete myapplication.iml

commit 5faae32e92c75e81a6b517a096697b8118b22afe
Author: 11Derek11 <dereklaumann@hotmail.com>
Date: Sun Apr 8 03:19:33 2018 -0400

    Delete proguard-rules.pro

commit bf11652544248ae35f538b215d422d3f4d9297b2
Author: Derek <dereklaumann@hotmail.com>
Date: Sun Apr 8 03:09:55 2018 -0400

    Login xml

commit c24ea2ecb6e898f40211164267ee8438ece6876a
Author: Saul Paredes <sparedesq@gmail.com>
Date: Sat Apr 7 23:10:21 2018 -0400

    added lottery summary

commit fd6d4ab73a97d45a1ba816a9102ecf86a1528922
Author: Saul Paredes <sparedesq@gmail.com>
Date: Sat Apr 7 22:32:36 2018 -0400

    it's green now

commit c002c32821cb5182f4882e500efe9b1f243bea12
Author: Saul Paredes <sparedesq@gmail.com>
Date: Sat Apr 7 15:55:50 2018 -0400

    workinf feed

commit fab47fd5a67edfb1de2b54940a2268f75dcd4636
Author: Saul Paredes <sparedesq@gmail.com>
Date: Sat Apr 7 12:42:34 2018 -0400

    login enabled

commit 999eb65e2d1b9d67d9214195b32334b4ab4bc07d
Author: Saul Paredes <sparedesq@gmail.com>
Date: Thu Apr 5 18:24:57 2018 -0400

    migrating from history to feed fragments. Working on new lottery interface

commit 5344d571ccaba8be5b248bc5a3bacbd205e6c22e
Author: shak582 <shak582@hotmail.com>
Date: Thu Apr 5 22:43:05 2018 +0000

    changed lottery rotation

commit d5bceb28221bf50d707ad42ff5c99057b9245fee
Author: shak582 <shak582@hotmail.com>
Date: Thu Apr 5 22:38:55 2018 +0000

    added python backend

commit 7c300aad599c7ebec14021aeb41c0b2d0f7b6025
Author: DavidScherArazi <ds13ae@my.fsu.edu>
Date: Wed Mar 21 10:44:03 2018 -0400

    Update coinFlipAutomaticSD.sol

    updated to reduce gas usage

commit 72c7e1ad79c5db0568bf43d0b3c65de724f9b063
Author: Saul Paredes <sparedesq@gmail.com>
Date: Wed Mar 21 09:32:22 2018 -0400

    sending and receiving from the server

commit 713e7dbdf40ee005ed33cfb9e73ae309d14a5433
Author: shak582 <shak582@hotmail.com>

Date: Mon Mar 19 18:12:38 2018 -0400

    changed function name better work with test

commit 4f9e51efbbf8edc9f01c4a7005798cb6afd24621
Author: shak582 <shak582@hotmail.com>
Date: Mon Mar 19 18:11:31 2018 -0400

    added deposit so the owner can add more cash

commit 1abf160bf1ce97199fd7a5cd3fa7c79362a8e9ea
Author: shak582 <shak582@hotmail.com>
Date: Mon Mar 19 18:09:19 2018 -0400

    test the cashOut function in the sc

commit d2b40678d3b54fc5dbbd7e4855eafd698f4faa2d
Author: shak582 <shak582@hotmail.com>
Date: Mon Mar 19 18:07:55 2018 -0400

    decoding the string to check the message

    we would check the bytes themselves, which was prone to error. Now it gets parsed.

commit 5a6d0d12fbdb58a42fc363d4b12208e033d5585d
Author: DavidScherArazi <ds13ae@my.fsu.edu>
Date: Mon Mar 19 15:47:01 2018 -0400

    Update and rename coinFlipAutomaticSD to coinFlipAutomaticSD.sol

    Split the original coinFlip.sol into two contracts with differing functionality. Added comments

commit e70d6f003524d8e8aea9572d993f19b18277f51a
Author: DavidScherArazi <ds13ae@my.fsu.edu>
Date: Mon Mar 19 15:44:33 2018 -0400

    Update coinFlipAutomaticSD

commit 7dadd7ade5b29d87d5d9df6c217f47dda9ee21e4
Author: DavidScherArazi <ds13ae@my.fsu.edu>
Date: Mon Mar 19 15:43:58 2018 -0400

    Update CoinFlip.sol

commit c7375db0b8397b9663d04f6c722bab308cace256
Author: DavidScherArazi <ds13ae@my.fsu.edu>
Date: Mon Mar 19 15:30:13 2018 -0400

    Update coinFlipAutomaticSD

commit 0e26100954878cae42c555b49190d067b6835ed3
Author: DavidScherArazi <ds13ae@my.fsu.edu>
Date: Mon Mar 19 15:29:16 2018 -0400

    Create coinFlipAutomaticSD

commit a6cf6c8335d644302e0c210baeef7fc6ff16e4f4
Author: shak582 <shak582@hotmail.com>
Date: Mon Mar 19 01:03:34 2018 -0400

    Here I just deploy the contract

    to send ether use test

commit c60a519100ba5b47e9f3febb6a68ab2496ae2ae9

Author: Shak <shak582@hotmail.com>
Date: Mon Mar 19 01:00:16 2018 -0400

   Added a junit test to send 2 ether to the coinflip contract, and check if you win or lose

commit 53c11aa4287837a258925ba301948b71c1f59b6e
Author: shak582 <shak582@hotmail.com>
Date: Mon Mar 19 00:50:31 2018 -0400

   adding junit to test the heads or tails

commit 73c8cc6716243505fef2e8a26c86b6cb9d5f06ab
Author: shak582 <shak582@hotmail.com>
Date: Mon Mar 19 00:48:13 2018 -0400

   Made it a bit more convinient to test

commit b390c265e699291f5851fdb4f09473da9e802798
Author: DavidScherArazi <ds13ae@my.fsu.edu>
Date: Sun Mar 18 20:01:25 2018 -0400

   Update CoinFlip.sol

   Removed need for minimum bet to be passed to constructor. Now just makes minimum owner.msg.

   Need more testing for needing minimum bet, possibly buggy

commit 5eed55668919d079a9df97d812718e124a50182b
Author: DavidScherArazi <ds13ae@my.fsu.edu>
Date: Sun Mar 18 18:06:40 2018 -0400

   Update CoinFlip.sol

   Added fail event, and requiring amounts to be sent to contract. This is to make sure the owner and user are both betting equal and fair
   amounts. There is still room for improvement with RNG as well as letting the user bet more money. Note that uint bet will be in weis not
   ether.

commit 6739a5ab97343b4aaf443cc8fb6b9ecf62e80a56
Author: shak582 <shak582@hotmail.com>
Date: Fri Mar 16 16:45:36 2018 -0400

   quitando mi pass lol

commit 901cddcd5589230eebee76b1bb21abf91f5e18d5
Author: Saul Paredes <sparedesq@gmail.com>
Date: Thu Mar 15 18:09:10 2018 -0400

   implemented basic user structure

commit 3fffe3fbff8784c56e93eba915bcdf8a337167d2
Author: Isomorphic-Knots <35407630+Isomorphic-Knots@users.noreply.github.com>
Date: Tue Mar 13 11:39:03 2018 -0400

   Update CoinFlip.sol

   -added an event to print win/loss and amount won/lost to console whenever the event (coinflip game) occurs.
   -removed return string from playcoinflip
   -added kill function

commit 2f3b651416d118ee0ccdb528cf1d9b2e6b5684ff
Merge: 68738f5 ad7823d
Author: Derek <dereklaumann@hotmail.com>
Date: Sat Mar 10 15:20:09 2018 -0500

   Merge remote-tracking branch 'origin/master'

commit 68738f5a9dd447dfd6440e59fa981923db338577
Author: Derek <dereklaumann@hotmail.com>
Date: Sat Mar 10 15:18:08 2018 -0500

    Login xml file

commit ad7823d43cb4a29545047a469354d04bf06f4d0e
Merge: 04e60e4 521dfd4
Author: redent0r <sparedesq@gmail.com>
Date: Fri Mar 9 09:49:57 2018 -0500

    Merge remote-tracking branch 'origin/master'

    # Conflicts:
    #   app/src/main/java/com/example/redent0r/ethernal/TransactionFragment.java

commit 04e60e4418fe40e38763d0f726b9933ef54f068b
Author: redent0r <sparedesq@gmail.com>
Date: Thu Mar 8 16:32:27 2018 -0500

    transaction item layout and text formatting improved

commit 521dfd41c8d6b37406b0d63e7225153fe6926e41
Author: Derek <dereklaumann@hotmail.com>
Date: Thu Mar 8 19:54:39 2018 -0500

    Login Draft

commit 4d046fcca56c8c7e91e9ba80be96960671043b89
Author: redent0r <sparedesq@gmail.com>
Date: Thu Mar 8 16:32:27 2018 -0500

    transaction item layout and text formatting improved

commit 1d8df8035a0fb7b62a404216e219d4b7e5fc8303
Author: redent0r <sparedesq@gmail.com>
Date: Thu Mar 8 15:54:46 2018 -0500

    added author documentation

commit b87c76cc15b1b90224de1b18387571ed08059727
Author: redent0r <sparedesq@gmail.com>
Date: Thu Mar 1 21:05:34 2018 -0500

    added listview of transaction history

commit 75e5e4e63b2beaa6c7fa708fd30e0815dd18b2f6
Author: redent0r <sparedesq@gmail.com>
Date: Sun Feb 18 11:47:38 2018 -0500

    added users unit test

commit 6e2179108b645404106098176e70c172b640731e
Author: shak582 <shak582@hotmail.com>
Date: Sat Feb 17 22:46:26 2018 +0000

    just added a script to check local wallet balances in geth

commit 2a0d280a2e5d916812ebeb644d64cdb9a0afd6b7
Author: redent0r <sparedesq@gmail.com>
Date: Sat Feb 17 10:11:06 2018 -0500

    enabled fragment navigation through bottom nav bar

commit f4195416aaae10ee5d213af5eee8f4b0774f698c
Author: redent0r <sparedesq@gmail.com>
Date: Sat Feb 17 09:27:47 2018 -0500

    added search, history, and home fragments

commit 9aea0ea3d364daa2fd34af4a10c46a2ab6b6ad0a
Merge: 6acadee 8bf1b29
Author: DavidScherArazi <ds13ae@my.fsu.edu>
Date: Sat Feb 17 16:07:37 2018 -0500

    Merge pull request #1 from 11Derek11/DavidScherArazi-patch-1

    working coin flip

commit 8bf1b29011a5afa446beb477de229e6ee2b16973
Author: DavidScherArazi <ds13ae@my.fsu.edu>
Date: Sat Feb 17 15:57:18 2018 -0500

    remixed code

    Rewritten, still might not work? It seemingly does but I'm not confident because I can't see the address balances before and after. Still
    need a way to generate a real random number.

commit 6acadee09ed3fb044ac22321ec2585bcf59a2805
Author: shak582 <shak582@hotmail.com>
Date: Fri Feb 16 21:05:05 2018 +0000

    Trying to fix root directory android studio problem

commit 4c1ad8dbe3cd62d36281c29b956755fabe31c73a
Author: DavidScherArazi <ds13ae@my.fsu.edu>
Date: Thu Feb 15 23:11:14 2018 -0500

    Update CoinFlip.sol

    compiler yelling about missing public or private on function calls.

commit c9ba04009d98f36fcb9be8fa4e002fe3b18c9e64
Author: andrew <abkgithub@gmail.com>
Date: Thu Feb 15 19:17:54 2018 -0500

    first weinery bet

commit 8a444fcf532159c477fa49d5c25158386d1a2e8e
Author: shak582 <shak582@hotmail.com>
Date: Thu Feb 15 18:13:44 2018 +0000

    lmao

commit e8d26ab8817c95b9aef92e997af314024ff2a261
Author: shak582 <shak582@hotmail.com>
Date: Thu Feb 15 13:10:47 2018 -0500

    Delete AndroidManifest.xml

commit 083e4b48168151799a0c753f4a72e1d84ce52949
Author: shak582 <shak582@hotmail.com>
Date: Thu Feb 15 13:10:22 2018 -0500

    Delete build.gradle

commit baa17a630684dd5bc9e1085f7f10eab79c33efdc
Author: shak582 <shak582@hotmail.com>
Date: Thu Feb 15 13:07:57 2018 -0500

Delete build.gradle

commit 287f9a7b7c5cbf13fa5c132e176b5966d7f3a559
Author: shak582 <shak582@hotmail.com>
Date: Thu Feb 15 13:07:47 2018 -0500

    Delete TODO.txt

commit cc1eb7f832d2c5107a815f647a664d828709e1ba
Author: shak582 <shak582@hotmail.com>
Date: Thu Feb 15 18:02:57 2018 +0000

    forgot idea file

commit bf9c80f43d64cba2effa0f0d037c035a3376e435
Author: shak582 <shak582@hotmail.com>
Date: Thu Feb 15 18:01:00 2018 +0000

    Added code for backend and split backend from front end

commit 338407631efc5554165752a9dfdd0cfa6279c049
Author: redent0r <sparedesq@gmail.com>
Date: Wed Feb 14 19:31:16 2018 -0500

    Added bottom navigation bar

commit e172abaa142499f4eb41ed04fedb38a60b35fb12
Author: redent0r <sparedesq@gmail.com>
Date: Wed Feb 14 18:26:24 2018 -0500

    Initial commit

commit 757a02cf080a79f3f79ff68584a4bf55941fa191
Author: redent0r <sparedesq@gmail.com>
Date: Wed Feb 14 18:21:51 2018 -0500

    Initial commit

commit 544419fb582ab54f8b6b67fd66bc936d6d7862dc
Author: 11Derek11 <36118440+11Derek11@users.noreply.github.com>
Date: Sun Feb 4 09:22:06 2018 -0500

    Create TODO.txt