| Project Name | amos2022ss02-audit-chain |
|-------------------------------|--------------------------------------------------------------------------------------|
| | |
| Online team meeting | https://fau.zoom.us/j/63420352046?pwd=TEITeFZoTDFXNVRYUWVCR1ZpQmVPdz09 |
| Production system (if any) | |
| Test system (if any) | |
| GitHub repository | https://github.com/amosproj/amos2022ss02-audit-chain |
| GitHub kanban board (project) | https://github.com/amosproj/amos2022ss02-audit-chain/projects |
| Team T-shirt (white) | https://www.shirtinator.de/loadBasket/1CxTZ1RYcrz |
| Team T-shirt (black) | https://www.shirtinator.de/loadBasket/1CxTZ1RYcrz |
| Additional materials | https://drive.google.com/drive/folders/1Hf5l4l0L0jxXnNfANrMft7RYdwUBlvr4?usp=sharing |
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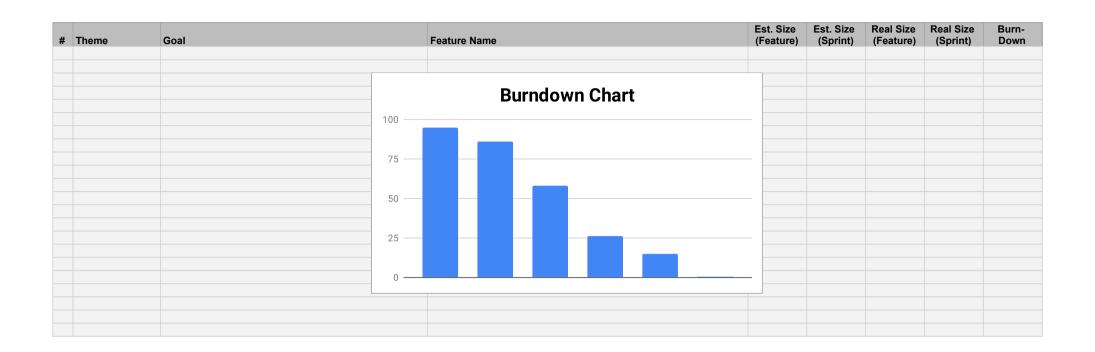
| Last Name | First Name | GitHub User Name | Email Address |
|------------|------------------|--------------------|-----------------------------|
| Schmidt | David | Lavicola | david.dav.schmidt@fau.de |
| Shanabhag | Gajanana | gdshanbhag | gajanana.shanabhag@fau.de |
| Mazzini | Francesco | francescomazzini | francesco.mazzini@fau.de |
| Linkies | Sebastian | jaRulez | sebastian.linkies@fau.de |
| Papadaki | Anastasia | annipap | anastasia.p.papadaki@fau.de |
| Rehm | Ronja | ronjarehm | ronja.rehm@fau.de |
| Khalid | Muhammad Ibrahim | ibs337 | ibrahim.khalid@fau.de |
| Srikhaolan | Charinee | CharineeSrikhaolan | Charinee.Srikhaolan@fau.de |
| D'Ercoli | Chiara | cdercoli | chiara.dercoli@fau.de |
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| Signature | Sebastian Linkies, Ronja Rehm, David Schmidt, Gajanana Shanabhag, Francesco Mazzini, Anastasia Papadaki, Ibrahim Khalid, Khaled Saifullah, Charinee Srikhaolan |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General Norms | Always be kind, respect each other and discuss problems openly. Ask for if assistance of Prof. Riehle if neccessary. |
| Sanctions | Recurring laxity in commitment of a team member have to be discussed in the team and the Scrum master tries to motivate the team member. In case of continous decline, we contact the assistants of Prof. Riehle. For acceptable excuses, it is encouraged to notify beforehand any problems are faced. |
| Rewards | Going out for a beer and making each other compliments. |
| Cont. improvement norms | The team progress is tracked how efficiently the team breaks down problems into tasks and if the team is able to solve all issues in the sprint session. SD's giving each other construtive feedback, if there is a more efficient solution or coding style. In case of good team collaboration (Happiness index) and productive working atmosphere we will go out for a beer. |
| Consideration norms | In case of disagreements the team discusses openly but objectively, all opinions are welcome. The majority of votes has to be made upon the impact of the decision and the urgency, in case of not achieving a compromiss the Scrum master needs to be contacted. |
| Communication norms | The sprint sessions on wednesday will be held in Zoom. Apart from our regular meeting, the team communicates via Discord, which has to be checked regularly - the response time should be within 24 hours. Personal communication, in case of urgent matters, is always be possible. Our internal files platform will be a Google Drive folder. |
| Coordination norms | The Scrum Master has the role of the moderator and support the team in lead us through the agenda of our meetings, the roles of Scrum, approach interpersonal problems and help us to deliver required artifacts on time. The Release manager is responsible for the technical part of every sprint - the software developers agree on the Release manager every sprint. |
| Working norms | Team members should discuss objectively and decisions have to be made unanimously. Overall attendance have to above > 80% and team members have to be punctual (not later than 5 minutes!). Criticism should be formulated in a constructive manner and and in case of different opinions, a compriss have to be find. We stick to our definded coding guidelines, our sprint sessions are conducted regarding to the SCRUM rules and in case of major changes in code we will notify all software developers. If team member face troubles with each others, the team is expected to support the individuals and find a solution, which fit to their opinions. |
| Meeting norms | Mandatory team meeting time is on wednesday at 12.30 for our sprint session, which takes 90 minutes. Additionally, we will meet weekly our industry partner to discuss our progress and requirements and meeting eventually a second time per week if required. |
| Goals | Learning objectives: Gaining knowledge about agile methods and continous improvement of required skill set (i.e. coding). Moreover, interpersonal relationships are also an important objective. To meet all team members with respect and working a focused but pleasure working atmosphere. Finally, we aim to achieve our defined project goals and work closely and efficient with our industry partner. |

| # | Meeting Day | Uni | Comment | Product Owner | Software Developer | Release Manager | Scrum Master |
|----|-------------|-----|---------------|---------------------------------|--------------------|-------------------------|---------------------|
| 1 | 2022-04-27 | | | Ronja Rehm Sebastian Linkies | Everyone else | N/A | Charinee Srikhaolan |
| 2 | 2022-05-04 | | | Ronja Rehm Sebastian Linkies | Everyone else | Anastasia Papadaki | Charinee Srikhaolan |
| 3 | 2022-05-11 | Yes | | Ronja Rehm Sebastian Linkies | Everyone else | Gajanana Shanabhag | Charinee Srikhaolan |
| 4 | 2022-05-18 | | | Ronja Rehm Sebastian Linkies | Everyone else | Francesco Mazzini | Charinee Srikhaolan |
| 5 | 2022-05-25 | Yes | | Ronja Rehm Sebastian Linkies | Everyone else | Francesco Mazzini | Charinee Srikhaolan |
| 6 | 2022-06-01 | | | Ronja Rehm Sebastian Linkies | Everyone else | Gajanana Shanabhag | Charinee Srikhaolan |
| 7 | 2022-06-08 | Yes | Mid-term due | Ronja Rehm Sebastian Linkies | Everyone else | Anastasia Papadaki | Charinee Srikhaolan |
| 8 | 2022-06-15 | | | Ronja Rehm Sebastian Linkies | Everyone else | Muhammad Ibrahim Khalid | Charinee Srikhaolan |
| 9 | 2022-06-22 | | | Ronja Rehm Sebastian Linkies | Everyone else | Francesco Mazzini | Charinee Srikhaolan |
| 10 | 2022-01-13 | Yes | | Ronja Rehm Sebastian Linkies | Everyone else | Chiara D'Ercoli | Charinee Srikhaolan |
| 11 | 2022-01-20 | | | Ronja Rehm Sebastian Linkies | Everyone else | Anastasia Papadaki | Charinee Srikhaolan |
| 12 | 2022-01-27 | | | Ronja Rehm Sebastian Linkies | Everyone else | Gajanana Shanabhag | Charinee Srikhaolan |
| 13 | 2022-02-03 | Yes | | Ronja Rehm Sebastian Linkies | Everyone else | , | Charinee Srikhaolan |
| 14 | 2022-02-10 | | Demo day! | Ronja Rehm Sebastian Linkies | Everyone else | | Charinee Srikhaolan |
| 15 | 2022-02-17 | | Retrospective | Ronja Rehm Sebastian Linkies | Everyone else | | Charinee Srikhaolan |
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| Product Vision | Project Mission |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The long-term goal of our project is to develop a new middleware based on blockchain data structures to guarantee the unchanged, compliant, in sequence, fault tolerant and buffered data flow between any kind of producers and consumers. Events of all kind (i.e. loT or file systems) are meant to be transmitted securely via the network to enhance the security for end users through tamper-proof events that can be transmitted without any losses. | The mission is to deliver a MVP of a audit-proof recording of file system events to Grau Data. For this purpose there is a central event queue, which receives events from a producer and provides them a consumer, which is built on a underlying |
| | |

| # | Theme | Goal | Feature Name | Est. Size (Feature) | Est. Size (Sprint) | Real Size (Feature) | Real Size (Sprint) | Burn- Down |
|------------|---------------|------------------------------------------------------|----------------------------------------------------------------------------------|------------------------|-----------------------|------------------------|-----------------------|---------------|
| | Total | | | | 92 | | 95 | 95 |
| 1 | Initial Setup | | | | 9 | | 9 | 86 |
| | | Conductive administrative tasks and initiate project | | | | | | |
| | | , | Preparing Team Contract | 2 | | 2 | | |
| | | | Meeting with Industry Partner | 1 | | 1 | | |
| | | | Design Team Logo and T-Shirt | 1 | | 1 | | |
| | | | Organizing Release managers and discussing programming | | | | | |
| | | | experience | 1 | | 1 | | |
| | | | Discussing communication strategy and preferred programming | | | | | |
| | | | language | 2 | | 2 | | |
| | | | Create branch strategy in GitHub | 2 | | 2 | | |
| | | | | | | | | |
| 2 | Fundamentals | | | | 26 | | 28 | 58 |
| | | Programming prototypes of software components | | | | | | |
| | | | Creating Software Architecture | 3 | | 5 | | |
| | | | Programm Consumer Prototype | 5 | | 5 | | |
| | | | Programm Producer Dummy in Java | 3 | | 3 | | |
| | | | Programm Producer Dummy in Python | 3 | | 3 | | |
| | | | Setup RabbitMQ as Event Queue | 3 | | 3 | | |
| | | | Research of suitable Blockchain technology | 8 | | 8 | | |
| | | | Provide Bill of Materials | 1 | | 1 | | |
| | | | | | | | | |
| 3 F | Refinements | | | | 31 | | 32 | 26 |
| | | Evaluating message flow and refinement of software | | | <u> </u> | | <u> </u> | |
| | | components | | | | | | |
| | | | Facilitate to aggregate messages to one data package | 3 | | 5 | | |
| | | | Integrating Blockchain data structure in Consumer Dummy | 5 | | 5 | | |
| | | | Recovering of missing data in Producer Dummy | 5 | | 3 | | |
| | | | Evaluate secure data sources for Producer Dummy | 2 | | 3 | | |
| | | | Revising Blockchain | 3 | | 3 | | |
| | | | Check for message integrity | 5 | | 5 | | |
| | | | Creating message acknowledgement for Producer Dummy | 8 | | 8 | | |
| | | | | | | | | |
| | Testing | | | | | | | |
| | | Creating Unit Tests for software components | | | 11 | | 11 | 15 |
| | | or outing out roots for dollars domponents | JUnit Test for Producer Dummy | 5 | | 5 | | |
| | | | JUnit Test for Consumer Dummy | 3 | | 3 | | |
| | | | JUnit Test for Blockchain | 3 | | 3 | | |
| | | | DOTHE TEST TO BIOCKCHAIN | | | - 0 | | |
| | Documentation | | | | | | | |
| | Documentation | Creating documentation for software components | | | 15 | | 15 | 0 |
| | | oreating documentation for software components | Create documentation for repository | 8 | 13 | 8 | 13 | U |
| | | | Create documentation for Producer Dummy | 2 | | 2 | | |
| | | | Create documentation for Producer Dummy Create documentation for Consumer Dummy | 2 | | 2 | | |
| | | | Create documentation for Blockchain | 3 | | 3 | | |
| | | | Greate documentation for blockchain | 3 | | 3 | | |
| | | | | | | | | |
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| # | Theme | Goal | Feature Name | Est. Size (Feature) | Est. Size (Sprint) | Real Size (Feature) | Real Size (Sprint) | Burn- Down |
|---|-------------|--------------------------|-------------------------------------|------------------------|-----------------------|------------------------|-----------------------|---------------|
| | Refactoring | | - Catalo Namo | (1 0000010) | (0) | (i dutai d) | (0):() | |
| | | Refactoring Project code | | | | | | |
| | | | Refactoring code for Producer Dummy | | | | | |
| | | | Refactoring code for Consumer Dummy | | | | | |
| | | | Refactoring code for Blockchain | | | | | |
| 7 | Testing | | | | | | | |
| | | Testing Project Code | | | | | | |
| | | | Improving Test Coverage Blockchain | | | | | |
| | | | Testing the whole System | | | | | |
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| Term | Definition |
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| ŧ | Feature Definition of Done | Sprint Release Definition of Done | Project Release Definition of Done |
|---|------------------------------------------------------------------------|------------------------------------------------------------------------|------------------------------------------------------------------------|
| | Feature Code Review has been completed and passed | Feature Code Review has been completed and passed | Feature Code Review has been completed and passed |
| | a) Code is completly implemented | a) Code is completly implemented | a) Code is completly implemented |
| | b) Code is structured according to our coding guidelines and commented | b) Code is structured according to our coding guidelines and commented | b) Code is structured according to our coding guidelines and commented |
| | c) Code is checked into repository | c) Code is checked into repository | c) Code is checked into repository |
| | d) Documentation is updated | d) Documentation is updated | d) Documentation is updated |
| 2 | Cleanliness of Code | Cleanliness of Code | Cleanliness of Code |
| 3 | JUnit Tests have been written and passed (if required) | JUnit Tests have been written and passed (if required) | JUnit Tests have been written and passed (if required |
| 4 | No critical bugs are open | All known bugs are fixed | All known bugs are fixed |
| 5 | Feature branch has been tagged and merged | Code has been inclued into the release (candidate) | Software prototype passes external review |
| | Feature Code has been included into the release (candidate) | | User documentation passes external review |
| 7 | Product Owners accept Feature | | Developer documentation is available |
| 8 | Code Coverage: | Code Coverage: | Code Coverage: |
| | 60% for Features | 70% for Sprint Release | 80% for Product Release |
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| Type | Link / reference |
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| 1 | Context | Name | Version | License | Comment |
|---|----------------|----------|----------------|---------|----------------------------------------------|
| | Backend | Python | 3.10.4 | MIT | software is programmed in python |
| | Backend | Java | 8.0 Update 333 | MIT | second Producer Dummy |
| | Message Broker | RabbitMQ | 3.10.0 | MIT | implements Advanced Message Queuing Protocol |
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| Last Name | First Name | Value | | | |
|-----------|-------------------------|-------|------|------------------|--|
| Schmidt | David | 2 | | | |
| Shanabhag | Gajanana | 2 | 2.00 | OK | |
| Mazzini | Francesco | 2 | 2.00 | UN | |
| Papadaki | Anastasia | 2 | | | |
| D'Ercoli | Chiara | 2 | 0 | No size | |
| Khalid | Muhammad Ibrahim | 2 | 1 | Trivial size | |
| | | | 2 | Small size | |
| | | | 3 | Medium size | |
| | | | 5 | Large size | |
| | | | 8 | Very large size | |
| | | | 13 | Too large (size) | |
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