| Project Name | ... |
|---|---|
| | |
| **Online team meeting** | https://fau.zoom.us/j/6803204673?pwd=WXNPdFZMNlln d2lETkptek41ay9wUT09 |
| | |
| **Production system (if any)** | ... |
| **Test system (if any)** | ... |
| | |
| | |
| **GitHub repository** | https://github.com/amosproj/amos2023ss02-open-search-meta-data-hub |
| **GitHub feature board** | https://github.com/orgs/amosproj/projects/16 |
| **GitHub impediments backlog** | https://github.com/orgs/amosproj/projects/20 |
| | |
| **Team T-shirt** | https://forms.gle/rdXqbq1WSFjwHkSx8 |
| **Shirt Männer weiß (straight)** | https://www.shirtinator.de/t-shirts/gestalten/t-shirt-bedrucken#/load/share/1ede23cb-6cd8-4c7e-add4-c36230174560 |
| **Shirt Damen weiß (fitted)** | https://www.shirtinator.de/t-shirts/gestalten/t-shirt-bedrucken#/load/share/08540543-2925-4dbd-b6ce-0f6520efca57 |
| | |
| | |
| **Google Drive** | https://drive.google.com/drive/folders/1q_4jGjhKRwsXwnjl5Y8Q8BE-SpLZvNBZ?usp=share_link |
| **Discord** | https://discord.gg/9sfDKWSE |
| **Mailing List** | oss-amos-proj2@lists.fau.de |
| | |
| **AMOS General Info** | AMOS SS 2023 - Organisation [Public] |
| **Homework File** | https://docs.google.com/document/d/1ELeRxm30hb7p6sNm3OtpFh6HGTuOhBOW_DTp98vCRQY/edit |
| **Amos-Happy** | https://happy-amos.appspot.com/Project?project=5925364299726848&course=6296268179505152 |
| **Miro Board for Retrospectives** | https://miro.com/app/board/uXjVMPOCVy4=/?share_link_id=101469504904 |
| | |
| | |

| Last Name | First Name | GitHub User Name | Email Address |
|---|---|---|---|
| Rotsching | Lukas | lukas-rotsching | lukas.rotsching@fau.de |
| Al-Sheikh | Tawfeek | tawfeeka | toofe.al-sheikh@fau.de |
| Wüllner | Corinna | i315315 | corinna.wuellner@fau.de |
| Ninach | Omar | oninach | omar.ninach@fau.de |
| Miltner | Jan | JMiltner97 | jan.miltner@fau.de |
| Elliger | Max Ole | motrell | ole.elliger@fau.de |
| Klaus | Leon | leondaniel22 | leon.klaus@fau.de |
| Meyer ter Vehn | Martin | martin-mtv | martin.meyerter.vehn@fau.de |
| Houssaen | Amir | Amir-Hussein-OTH | amir.hussein@fau.de |
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| # | Meeting Day | Product Owner | Software Developer | Release Manager | Scrum Master | Comment |
|---|---|---|---|---|---|---|
| 1 | 2023-04-19 | Tawfeek Al-Sheikh, Lukas Rotsching | Everyone else | N/A | Corinna Wüllner | |
| 2 | 2023-04-26 | Tawfeek Al-Sheikh, Lukas Rotsching | Everyone else | Omar | Corinna Wüllner | |
| 3 | 2023-05-03 | Tawfeek Al-Sheikh, Lukas Rotsching | Everyone else | Jan | Corinna Wüllner | |
| 4 | 2023-05-10 | Tawfeek Al-Sheikh, Lukas Rotsching | Everyone else | Max Ole | Corinna Wüllner | |
| 5 | 2023-05-17 | Tawfeek Al-Sheikh, Lukas Rotsching | Everyone else | Leon | Corinna Wüllner | |
| 6 | 2023-05-24 | Tawfeek Al-Sheikh, Lukas Rotsching | Everyone else | Martin | Corinna Wüllner | |
| 7 | 2023-05-31 | Tawfeek Al-Sheikh, Lukas Rotsching | Everyone else | Amir | Corinna Wüllner | Mid-term due |
| 8 | 2023-06-07 | Tawfeek Al-Sheikh, Lukas Rotsching | Everyone else | Omar | Corinna Wüllner | |
| 9 | 2023-06-14 | Tawfeek Al-Sheikh, Lukas Rotsching | Everyone else | Jan | Corinna Wüllner | |
| 10 | 2023-06-21 | Tawfeek Al-Sheikh, Lukas Rotsching | Everyone else | Max Ole | Corinna Wüllner | |
| 11 | 2023-06-28 | Tawfeek Al-Sheikh, Lukas Rotsching | Everyone else | Leon | Corinna Wüllner | |
| 12 | 2023-07-05 | Tawfeek Al-Sheikh, Lukas Rotsching | Everyone else | Martin | Corinna Wüllner | |
| 13 | 2023-07-12 | Tawfeek Al-Sheikh, Lukas Rotsching | Everyone else | Amir | Corinna Wüllner | |
| 14 | 2023-07-19 | Tawfeek Al-Sheikh, Lukas Rotsching | Everyone else | Omar | Corinna Wüllner | Demo day! |
| 15 | 2023-07-26 | Tawfeek Al-Sheikh, Lukas Rotsching | Everyone else | Jan | Corinna Wüllner | Retrospective |
| | | | | | | |
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|---|---|
| **Goals** | Be respectful to each other. Be nice and try not to be too harsh to your teammembers |
| | Make the teammeetings fun for every participant |
| | Help each other |
| | Be productive and work efficient |
| | |
| **Meeting norms** | Everybody has to show up |
| | Don't waste your teammates time |
| | Everyone comes prepared to the meetings |
| | Everyone is motivated and contributes actively |
| | |
| **Working norms** | Decissions are made democratically |
| | We support each other |
| | |
| **Coordination norms** | Everyone is responsible for his/her assigned tasks and has to deliver. If problems arise, tell the team in time |
| | Every developer can pick tickets for each sprint. Try to respect others' wishes |
| | POs moderate the meeting, but everyone can always state his/her opinion |
| | |
| **Communication norms** | Respect everyone's opinion |
| | Respond to messages at least on the next day |
| | Everyone checks all message channels at least on time per day (except weekends) |
| | |
| **Consideration norms** | POs can always stop discussions when thet deem them irrelevant or too specific for the whole team meeting |
| | The scrum master intervenes whenever a discussion gets out of hand |
| | |
| **Cont. improvement norms** | Try to improve the quality by giving constructive feedback |
| | Respect that every developer has his/her own way of doing things |
| | Try to find the underlying reason if the sprint plan fails |
| | |
| **Rewards** | We occasionally have meetings just for fun (eat dinner, drink some beer e.g.) |
| | |
| **Sanctions** | We always try to solve problems immediatly as a team. If that does not work out we will sanction specific behavior or a member after a democratic discussion |
| | |
| **Signed by** | Rotsching |
| | Miltner |
| | Al-Sheikh |
| | Elliger |
| | Ninach |

| | |
|---|---|
| | Corinna Wüllner |
| | Klaus |
| | Martin |
| | Houssaen |
| | |

| Product Vision | Project Mission |
| --- | --- |
| | |
| GRAUDATA has a product called Metadata-Hub. This is a tool that can index huge amounts of unordered data and thus enables its users to search and analyse this data. Simpy put - it's a data mining tool.<br>The Metadata-Hub comes with a dashboard that already has a search function. However, its capabilities are fairly limited and searching is only one function in this dashboard that is more of an admin console than a tool for regular users to interact with.<br>GRAUDATA's customers want a sleek yet powerful, scalable and easy to use search and statistics tool.<br>The OpenSearch Metadata-Hub provides exactly this. It is a fully self-contained tool that can import data from a Metadata-Hub core into an OpenSearch node. It comes with a sleek webinterface that enables the user to easily build complex search queries for OpenSearch and it shows statistics about the data, while not being overloaded with functionality unrelated to searching and statistics. This webinterface is usable by everyone that knows how to use a search engine. | The mission of the project is to setup the basic structure for the product and implement the core functionalities.<br>These are:<br>- run an OpenSearch node<br>- run an OpenSearch-Dashboards container that connects to the OpenSearch node<br>- automatically import data from a Metadata-Hub core into the OS node<br>- provide a website with a search bar and elements to create more complex search queries (e.g. boxes to add extra filters to the search)<br>- show statistics and graphs generated by the OpenSearch dashboard on the website that is intended for the user<br>- wrap everything into docker containers and create a docker-compose file or bash script so users can start the whole system with one command<br><br>Every customer has his own individual needs, especially when it comes to the statistics functionality. Thus, the whole product needs to be easily adaptable by the customer. We provide more of a template with some examples of what could be done and how, than a production-ready product.<br>Good documentation, not only on how to use the product but especially on what could be changed, how and where, is therefore mandatory! |

| Term | Definition |
| --- | --- |
| MdH | GRAUDATA's Metadata-Hub. A data mining tool. |
| OS | OpenSearch. A powerful and scalable tool to build search and analytics engines. |
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| Sprint | Theme | Goal | Feature Name | Est. Size | Est. Remaining | Real Size | Real Remaining |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| **Release** | Mid-term | | | | | | |
| | | | | | | | |
| | **Total** | | | 67 | 67 | 72 | 72 |
| | | | | | | | |
| **Sprints** | | | | | | | |
| | | | | | | | |
| 1 | **Get to know the team** | | | 0 | 67 | 0 | 72 |
| 2 | **OpenSearch and GRAUDATA MdH** | | | 10 | 67 | 11 | 72 |
| 3 | **Architecture and Project Setup** | | | 5 | 57 | 5 | 61 |
| 4 | **Frontend and Docker** | | | 18 | 52 | 17 | 56 |
| 5 | **Simple Search and a nice website** | | | 22 | 34 | 22 | 39 |
| 6 | **Advanced Search and Documentation** | | | 12 | 12 | 17 | 17 |
| | | | | | | | |
| **Features** | | | | | | | |
| | | | | | | | |
| **1** | **Get to know the team** | | | | | | |
| | | Get to know the team members and try to guess what the project will be about, even though we didn't have a meeting with our industry partner so far.<br>Refresh your python skills. | | | | | |
| | | | | | | | |
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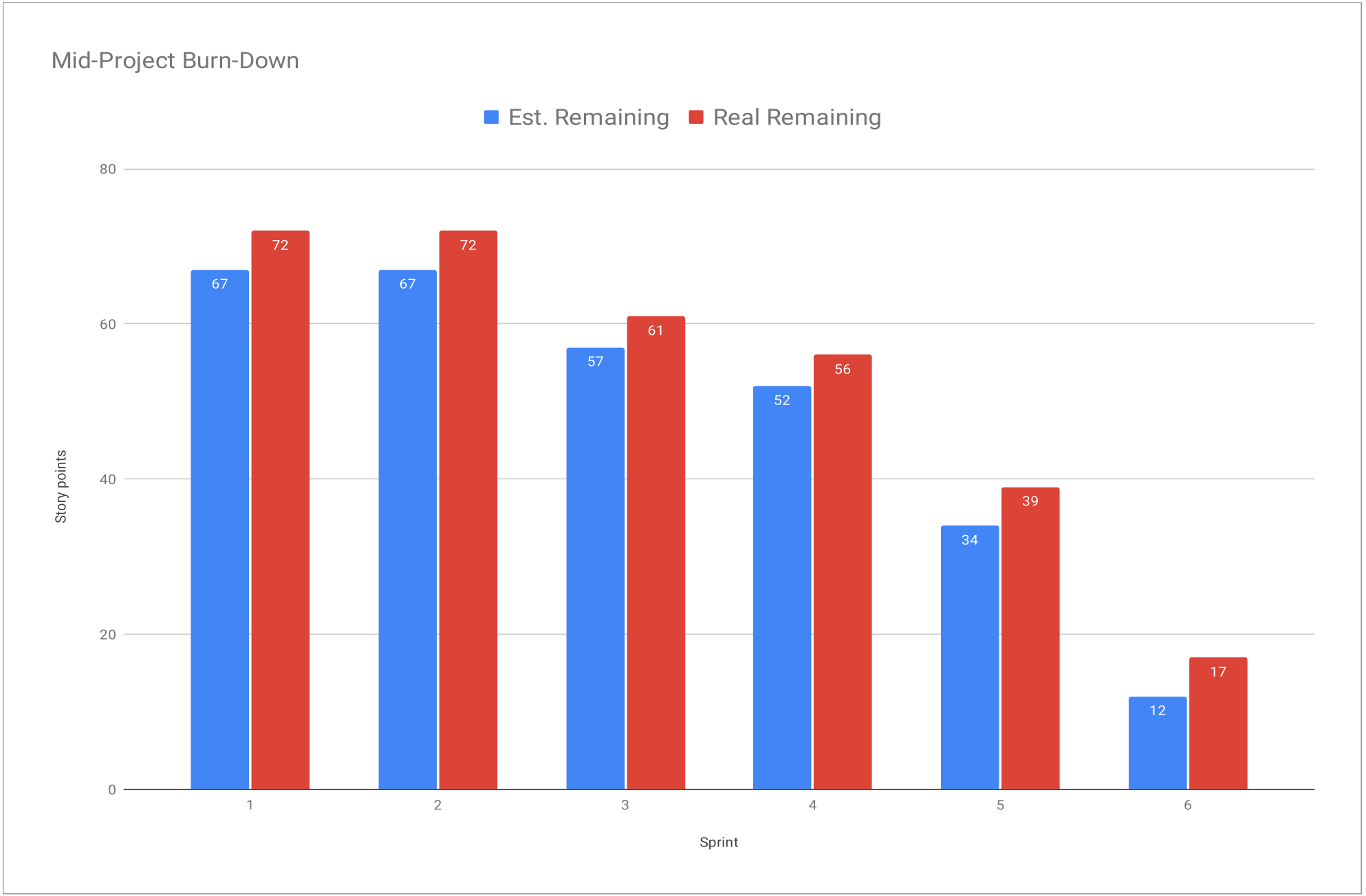
| | | | | | | | |
| **2** | **OpenSearch and GRAUDATA MdH** | | | | | | |
| | | Get as much information as possible about the technologies we need to work with. | | | | | |
| | | | Research: GRAUDATA Meta Data Hub | 3 | | 3 | |
| | | | Research: Docker | 2 | | 3 | |
| | | | Research: CI/CD pipeline | 2 | | 2 | |
| | | | Research: OpenSearch and Apache Lucene | 3 | | 3 | |
| | | | | | | | |
| **3** | **Architecture and Project Setup** | | | | | | |
| | | Design an architecture for the software and set up the basics. | | | | | |
| | | | Setup OpenSearch | 3 | | 0 | |
| | | | Setup OpenSearch Dashboard | 2 | | 5 | |
| **4** | **Frontend and Docker** | | | | | | |
| | | Create a website so users can interact with our system.<br>Implement search functionality on this website.<br>Put everything into docker containers for an easy setup. | | | | | |
| | | | Simple website | 2 | | 2 | |
| | | | Research Dashboard Statistics | 3 | | 3 | |
| | | | Simple Search | 5 | | 5 | |
| | | | Python script for automated import of data from an MdH Core | 5 | | 5 | |
| | | | Create an MdH-OpenSearch docker container | 3 | | 2 | |
| **5** | **Simple Search and a nice website** | | | | | | |

| Sprint | Theme | Goal | Feature Name | Est. Size | Est. Remaining | Real Size | Real Remaining |
|---|---|---|---|---|---|---|---|
| | | Use the power of a webframework so we don't have to do everything ourselves.<br>Improve the backend. | | | | | |
| | | | Setup backend for the website | 3 | | 3 | |
| | | | Efficient data transportation | 5 | | 5 | |
| | | | Documentation | 3 | | 1 | |
| | | | Statistics: Filetypes | 3 | | 5 | |
| | | | Migrate the website to a webframework | 2 | | 3 | |
| | | | Data types | 3 | | 3 | |
| | | | Build process video | 3 | | 2 | |
| **6** | **Advanced Search and Documentation** | | | | | | |
| | | Write user/build/deploy documentation<br>Implement an advanced search that allows to create custom filters that can be combined freely. | | | | | |
| | | | Design and build/deploy Documentation | 3 | | 3 | |
| | | | Setting up a CI/CD pipeline for automated testing | 3 | | 3 | |
| | | | Advanced Search Frontend | 3 | | 3 | |
| | | | Advanced Search Backend | 3 | | 8 | |
| | | | | | | | |


Mid-Project Burn-Down
Est. Remaining
Real Remaining
80
60
40
20
0
Story points
67
72
67
72
57
61
52
56
34
39
12
17
1
2
3
4
5
6
Sprint

| Sprint | Theme | Goal | Feature Name | Est. Size | Est. Remaining | Real Size | Real Remaining |
|---|---|---|---|---|---|---|---|
| **Release** | Final-term | | | | | | |
| | **Total** | | | 115 | 115 | 107 | 107 |
| **Sprints** | | | | | | | |
| 1 | **Get to know the team** | | | 0 | 115 | 0 | 107 |
| 2 | **OpenSearch and GRAUDATA MdH** | | | 10 | 115 | 11 | 107 |
| 3 | **Architecture and Project Setup** | | | 5 | 105 | 5 | 96 |
| 4 | **Frontend and Docker** | | | 18 | 100 | 17 | 91 |
| 5 | **Simple Search and a nice website** | | | 22 | 82 | 22 | 74 |
| 6 | **Advanced Search and Documentation** | | | 12 | 60 | 17 | 52 |
| 7 | **Refactoring** | | | 10 | 48 | 10 | 35 |
| 8 | **Data visualizations and Import pipline** | | | 21 | 38 | 25 | 25 |
| 9 | **Error handling and video-scripts** | | | 17 | 17 | 0 | 0 |
| 10 | | | | 0 | 0 | 0 | 0 |
| 11 | | | | 0 | 0 | 0 | 0 |
| 12 | | | | 0 | 0 | 0 | 0 |
| 13 | | | | 0 | 0 | 0 | 0 |
| **Features** | | | | | | | |
| **1** | **Get to know the team** | | | | | | |
| | | Get to know the team members and try to guess what the project will be about, even though we didn't have a meeting with our industry partner so far.<br>Refresh your python skills. | | | | | |
| **2** | **OpenSearch and GRAUDATA MdH** | | | | | | |
| | | Get as much information as possible about the technologies we need to work with. | | | | | |
| | | | Research: GRAUDATA Meta Data Hub | 3 | | 3 | |
| | | | Research: Docker | 2 | | 3 | |
| | | | Research: CI/CD pipeline | 2 | | 2 | |
| | | | Research: OpenSearch and Apache Lucene | 3 | | 3 | |
| **3** | **Architecture and Project Setup** | | | | | | |
| | | Design an architecture for the software and set up the basics. | | | | | |
| | | | Setup OpenSearch | 3 | | 0 | |
| | | | Setup OpenSearch Dashboard | 2 | | 5 | |
| **4** | **Frontend and Docker** | | | | | | |
| | | Create a website so users can interact with our system.<br>Implement search functionality on this website.<br>Put everything into docker containers for an easy setup. | | | | | |
| | | | Simple website | 2 | | 2 | |
| | | | Research Dashboard Statistics | 3 | | 3 | |

| Sprint | Theme | Goal | Feature Name | Est. Size | Est. Remaining | Real Size | Real Remaining |
|---|---|---|---|---|---|---|---|
| | | | Simple Search | 5 | | 5 | |
| | | | Python script for automated import of data from an MdH Core | 5 | | 5 | |
| | | | Create an MdH-OpenSearch docker container | 3 | | 2 | |
| **5** | **Simple Search and a nice website** | | | | | | |
| | | Use the power of a webframework so we don't have to do everything ourselves.<br>Improve the backend. | | | | | |
| | | | Setup backend for the website | 3 | | 3 | |
| | | | Efficient data transportation | 5 | | 5 | |
| | | | Documentation | 3 | | 1 | |
| | | | Statistics: Filetypes | 3 | | 5 | |
| | | | Migrate the website to a webframework | 2 | | 3 | |
| | | | Data types | 3 | | 3 | |
| | | | Build process video | 3 | | 2 | |
| **6** | **Advanced Search and Documentation** | | | | | | |
| | | Write user/build/deploy documentation<br>Implement an advanced search that allows to create custom filters that can be combined freely. | | | | | |
| | | | Design and build/deploy Documentation | 3 | | 3 | |
| | | | Setting up a CI/CD pipeline for automated testing | 3 | | 3 | |
| | | | Advanced Search Frontend | 3 | | 3 | |
| | | | Advanced Search Backend | 3 | | 8 | |
| | | | | | | | |
| **7** | **Refactoring** | | | | | | |
| | | Clean up the code and remove/reduce technical debt so we can start into the second phase with a clean and easy to work with code base.<br>Tweaks to the UI | | | | | |
| | | | Show more info about search results | 2 | | 2 | |
| | | | Refactor backend | 5 | | 5 | |
| | | | Include statistics created by the OpenSearch Dashboard on your own site | 3 | | 3 | |
| **8** | **Data visualizations and Import pipline** | | | | | | |
| | | The statistics from the Open Search Dashboard are automatically imported into the project website.<br>The script for importing data into MdH-OS will take timestamps into account. | | | | | |
| | | | Refactor Front-End | 5 | | 8 | |
| | | | Import pipeline | 5 | | 8 | |
| | | | Automatic detection of data visualizations | 5 | | 3 | |
| | | | Remove filter criteria from an advanced search | 3 | | 3 | |
| | | | Advanced search (list tags) | 3 | | 3 | |
| **9** | **Error handling and video-scripts** | | | | | | |
| | | In this sprint we laid the groundwork for the config file by using a GraphQL library to dynamically create the request to the MdH Further, we improved error handling in the backend and started to write scripts for short explanation videos. | | | | | |
| | | | GraphQL API | 3 | | | |
| | | | Better error handling | 3 | | | |
| | | | Video-Scripts | 3 | | | |
| | | | Search Tag Boosting | 5 | | | |

| Sprint | Theme | Goal | Feature Name | Est. Size | Est. Remaining | Real Size | Real Remaining |
|---|---|---|---|---|---|---|---|
| | | | Design Overhaul | 3 | | | |
| **10** | | | | | | | |
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| **11** | | | | | | | |
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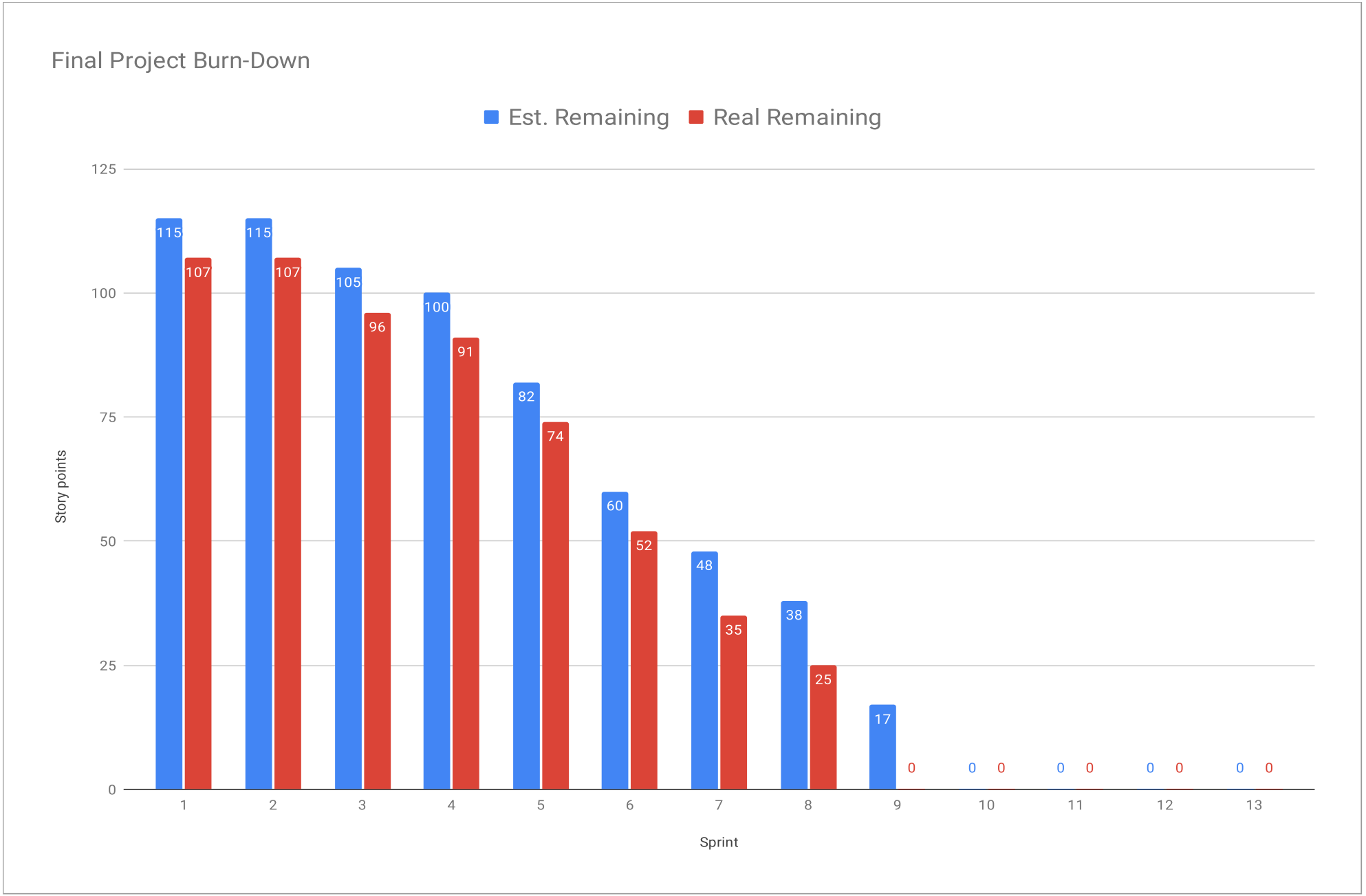
Final Project Burn-Down
Est. Remaining
Real Remaining
125
100
75
50
25
0
Story points
115
107
115
107
105
96
100
91
82
74
60
52
48
35
38
25
17
0
0
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0
0
0
0
0
0
1
2
3
4
5
6
7
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Sprint

| # | Feature Definition of Done | Sprint Release Definition of Done | Project Release Definition of Done |
|---|---|---|---|
| | A feature is considered complete when all of its acceptance criteria have been met. | A sprint release is considered complete when there are no critical bugs left open. | A project release is considered complete when the documentation is complete. |
| | A feature is considered complete when it has been thoroughly tested. | A sprint release is considered complete when the entire software can be executed without any issues. | A project release is considered complete when the Bill of Materials is complete. |
| | A feature is considered complete when it can be seamlessly integrated into the main branch without causing any negative side effects. | A sprint release is considered complete when the Bill of Materials has been updated. | A project release is considered complete when the software runs without any noticeable bugs. |
| | A feature is considered complete when its core functionality has been thoroughly documented. | A sprint release is considered complete when the documentation has been updated. | A project release is considered complete when it is agreed that the core functionality has been provided. |
| | A feature is considered complete when the code has been peer reviewed by the dedicated team. | | |
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| # | Context | Name | Version | License | Comment |
|---|---|---|---|---|---|
| | opensearch.org | OpenSearch | 2.7.0 | Apache License, Version 2.0 (ALv2) | |
| | | GRAU DATA MdH Python SDK | 2.3.0 | ? | |
| | | GRAU DATA Meta Data Hub | 2.3 | ? | |
| | https://flask.palletsprojects.com/en/2.3.x/ | Flask | 2.3.2 | BSD License (BSD-3-Clause) | Framework, used for creating a Webserver |
| | https://opensearch-project.github.io/opensearch-py/ | opensearch_py | 2.2.0 | Apache Software License (Apache-2.0) | Library, used to as an API to OpenSearch |
| | https://github.com/theskumar/python-dotenv | python-dotenv | 1.0.0 | BSD License (BSD-3-Clause) | Library, used to create an environment |
| | https://pypi.org/project/python-dateutil/ | python-dateutil | 2.8.2 | license with Apache 2.0 | standard Python datetime module |
| | https://github.com/denisart/graphql-query | graphql-query | 1.1.1 | MIT License | Library, used for creating GraphQL queries |
| | https://github.com/pandas-dev/pandas | pandas | 2.0.2 | BSD License (BSD-3-Clause) | Flexible and powerful data analysis / manipulation library for Python |
| | https://github.com/helloflask/bootstrap-flask | bootstrap-flask | 2.2.0 | MIT License | Bootstrap 4 & 5 helper for your Flask projects. |
| | https://github.com/certifi/python-certifi | certifi | 2023.5.7 | MLP-2.0 | collection of Root Certificates for validating the trustworthiness of SSL certificates while verifying the identity of TLS hosts. |
| | https://github.com/Ousret/charset_normalizer | charset-normalizer | 3.1.0 | MIT License | |
| | https://github.com/kjd/idna | idna | 3.4 | BSD License (BSD-3-Clause) | Internationalized Domain Names for Python |
| | https://github.com/psf/requests | requests | 2.30.0 | Apache Software License (Apache-2.0) | HTTP library |
| | https://github.com/benjaminp/six | six | 1.16.0 | MIT License | |
| | https://github.com/urllib3/urllib3 | urllib3 | 1.26.15 | MIT License | HTTP client library for Python |
| | | | | | |
| | | | | | |

| Last Name | First Name | Value | | | | | |
|---|---|---|---|---|---|---|---|
| **Rotsching** | **Lukas** | | | **3,00** | **OK** | | |
| **Al-Sheikh** | **Tawfeek** | | | | | | |
| **Wüllner** | **Corinna** | | | | | | |
| **Ninach** | **Omar** | 3 | | | | | |
| **Miltner** | **Jan** | 3 | | 0 | No size | | |
| **Elliger** | **Max Ole** | 3 | | 1 | Trivial size | | |
| **Klaus** | **Leon** | 3 | | 2 | Small size | | |
| **Meyer ter Vehn** | **Martin** | 3 | | 3 | Medium size | | |
| **Houssaen** | **Amir** | 3 | | 5 | Large size | | |
| | | | | 8 | Very large size | | |
| | | | | 13 | Too large (size) | | |