

| Project Name | |
|----------------------------|---|
| Online team meeting | https://fau.zoom-x.de/j/67054574883?pwd=d1hjWHcyREZnK3lrb25nN1VBNDVBQT09 |
| Production system (if any) | ... |
| Test system (if any) | ... |
| GitHub repository | https://github.com/amosproj/amos2023ws03-gui-frame-diff |
| GitHub feature board | https://github.com/orgs/amosproj/projects/27/views/2 |
| GitHub impediments backlog | https://github.com/orgs/amosproj/projects/37 |
| Team T-shirt (white) | https://www.shirtinator.de/s/yUTG2wN7RPi5Ynir3Ch2lg |
| Team T-shirt (black) | https://www.shirtinator.de/s/-tG1TSIMTuO9R0fVzbDHIQ |
| Additional materials | ... |
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| Last Name | First Name | GitHub User Name | Email Address | (Probable) Regular Availability | Monday | Tuesday | Wednesday | Thursday | Friday |
|------------|------------|------------------|------------------------------------|---------------------------------|--------------------|-----------|----------------|--------------------|---------------------|
| Frieß | Tobias | Freeze-FF | tobias.friess@fau.de | | | | | | |
| Günther | Luis | zino212 | luis.guenther@fu-berlin.de | | Afternoon | If Urgent | Whole Day | If Urgent | Afternoon |
| Kilicaslan | Alper | AlperK61 | alper.kilicaslan@fau.de | | from 5pm | from 5pm | Whole Day | Whole Day | till 9am from 5pm |
| Kriese | Anton | akriese | anton.kriese@fu-berlin.de | | Whole Day | Afternoon | from 4pm | Afternoon | from 5pm |
| Kurz | Noah | Noah-Kurz | noah.kurz@fau.de | | If Urgent | Afternoon | Whole Day | If Urgent | If Urgent |
| Mechs | Lukas | lukas-monet | lukas.mechs@fau.de | | | | | | |
| Novotnyy | Petro | a-miscellaneous | petro.novotnyy@campus.tu-berlin.de | | Unlikely | Unlikely | Whole Day | Afternoon | Afternoon |
| Sasse | Simon | simonsasse | simon.sasse@fu-berlin.de | | Whole Day | If urgent | After Meetings | If Urgent | if urgent |
| Seitz | Fabian | fs3itz | fabian.seitz@fau.de | | If Urgent from 6pm | Whole Day | Whole Day | If Urgent from 6pm | Unlikely |
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| # | Meeting Day | Product Owner | Software Developer | Release Manager | Scrum Master | Comment |
|----|-------------|----------------------------|--------------------|------------------|--------------|----------------------------|
| 1 | 2022-10-18 | Tobias Frieß & Lukas Mechs | Everyone else | N/A | Noah Kurz | First Meeting |
| 2 | 2022-10-25 | Tobias Frieß & Lukas Mechs | Everyone else | Simon Sasse | Noah Kurz | No Real Work |
| 3 | 2022-11-01 | Tobias Frieß & Lukas Mechs | Everyone else | N/A | Noah Kurz | No Meeting / 2 Week Sprint |
| 4 | 2022-11-08 | Tobias Frieß & Lukas Mechs | Everyone else | Fabian Seitz | Noah Kurz | |
| 5 | 2022-11-15 | Tobias Frieß & Lukas Mechs | Everyone else | Alper Kilicaslan | Noah Kurz | |
| 6 | 2022-11-22 | Tobias Frieß & Lukas Mechs | Everyone else | Luis Günther | Noah Kurz | |
| 7 | 2022-11-29 | Tobias Frieß & Lukas Mechs | Everyone else | Anton Kriese | Noah Kurz | |
| 8 | 2022-12-06 | Tobias Frieß & Lukas Mechs | Everyone else | Simon Sasse | Noah Kurz | Mid-term due |
| 9 | 2022-12-13 | Tobias Frieß & Lukas Mechs | Everyone else | Petro Novotnyy | Noah Kurz | |
| 10 | 2023-01-10 | Tobias Frieß & Lukas Mechs | Everyone else | Fabian Seitz | Noah Kurz | |
| 11 | 2023-01-17 | Tobias Frieß & Lukas Mechs | Everyone else | Anton Kriese | Noah Kurz | |
| 12 | 2023-01-24 | Tobias Frieß & Lukas Mechs | Everyone else | Luis Günther | Noah Kurz | |
| 13 | 2023-01-31 | Tobias Frieß & Lukas Mechs | Everyone else | Alper Kilicaslan | Noah Kurz | |
| 14 | 2023-02-07 | Tobias Frieß & Lukas Mechs | Everyone else | Simon Sasse | Noah Kurz | Demo day! |
| 15 | 2023-02-14 | Tobias Frieß & Lukas Mechs | Everyone else | Luis Günther | Noah Kurz | Retrospective |
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| Goals | Achieving a good overall result that meets the requirements and expectations of our industry partner. |
| | Develop a useful software for our industry partner e-solutions. |
| Meeting norms | Weekly group meeting: Online (zoom) Wednesday 12:30-14:00: Mandatory for all group members |
| | Weekly stakeholder meeting: Online Wednesday 15:30-16:30: Mandatory for PO and SM, SDs if possible |
| | Weekly SD meeting: Online Wednesday 17:00-17:30: Mandatory for SD and SM, POs if possible |
| | Punctuality is key, no delay is acceptable |
| Working norms | Clean code and software engineering practices |
| Coordination norms | During the weekly SD meeting all tickets are assigned to responsible SDs. |
| | It is the assignees job to coordinate the further work on the ticket, like breaking down the tickets into tasks, talking to assignees of dependent tickets and getting help if needed |
| | Every Taskowner bears the responsibility to deliver results until the end of the sprint |
| | During the weekly SD meeting all SDs can raise concerns if they need help by someone or can't spend time on the project for some reason. |
| | Everyone keeps the other teammembers updated by writing at least two standup mails per sprint. |
| Communication norms | For our regular communication we created a MS Teams Channel. If someone needs the response / help from other team members they raise a thread in the according channel and tag the needed person. The tagged group should get back to the person within 24h during working days. |
| | For important communication we created a WhatsApp Group. If someone needs the response / help from other team members and waited for more than 24h hours on their MS Teams response they can escalate it to the WhatsApp group. |
| | If someone recognizes that something goes wrong / someone needs help / can not work on their assigned tasks for whatever reason communicate this as early as possible by writing a post in MS Teams and tagging @allgemein. |
| | Every Monday afternoon is "gesteigerte Erreichbarkeit Montag". This means that everyone checks in and sees if there are help requests or other open todos which need immediate action. |
| Consideration norms | All product feature decisions are made from the Product Owner |
| | All technical decisions are made by the software developers (majority vote) |
| | The team votes for a final decision if the whole project gets impacted, Disagreements have to be discussed immediately |
| Cont. improvement norms | use linter |
| | general code rules (use conventions and design guide of the used programming language) |
| | code review (use git hub pull request -> reviewer will be assigned randomly by github) |
| | use weekly team meeting for general problems and improvements |

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| Rewards | do a final release party |
| Sanctions | 1) if someone does not meet a goal we will discuss in team meeting what should happen 2) team decides what should happen |
| Signatures | PN |
| Scrum Master | Noah Kurz |
| Product owner | Tobias Frieß |
| Product owner | Lukas Mechs |
| Software developer | Luis Günther |
| Software developer | Alper Kilicaslan |
| Software developer | Anton Kriese |
| Software developer | Petro Novotnyy |
| Software developer | Simon Sasse |
| Software developer | Fabian Seitz |

| Product Vision | Project Mission |
|--|---|
| <p>The GUI Frame Diff tool is envisioned as a powerful, intuitive, and efficient solution for comparing sequences of screenshots. Our primary objective is to ensure seamless integration with existing interfaces and structures.</p> <p>The user interface, inspired by the functionality of video editing tools, is designed to offer an intuitive and efficient way to utilize the tool's capabilities. A wide range of customizable settings are available directly within the GUI, allowing users to optimize the output of the diff video according to their specific needs.</p> <p>Beyond its core functionality, the GUI Frame Diff tool is designed with extensibility in mind. It can serve as a foundation for a variety of additional use cases, such as machine learning applications or the creation of tree-like data structures for enhanced data overview. This flexibility makes it a versatile tool that can adapt to the evolving needs of its users.</p> | <p>The mission of this project is to develop a comprehensive and efficient GUI Frame Diff tool, structured into three synergistic libraries. Library 1 will focus on optimizing storage efficiency. It will combine multiple screenshots from a car's infotainment system into a single, compact video file. The key goal is to significantly reduce storage consumption without compromising the quality and integrity of the visual data. The core functionality of Library 2 is to accurately identify and articulate changes between two video sequences. This includes both frame-level modifications and pixel-level differences within frames. Building upon Library 2, UI-focused Library 3 will provide a user-friendly interface that allows users to effortlessly generate and visualize differences between videos.</p> |

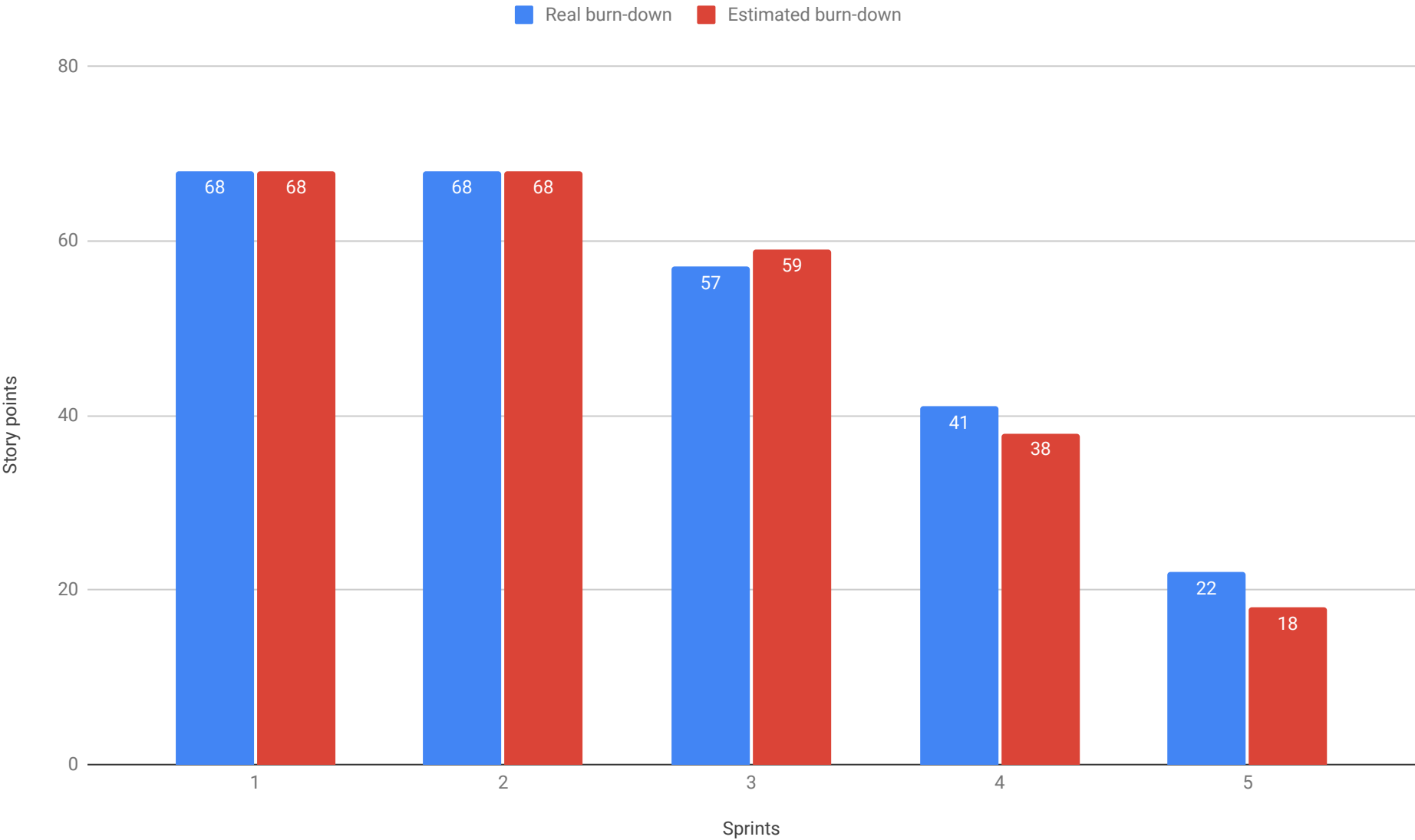
| Term | Definition |
|------------------|--|
| Image | A image is a screenshot of a certain state of the car's infortainment system |
| Video Difference | A video difference between two videos can be a added or deleted frame or a pixel difference within a frame |
| Head Unit | The infotainment system of a car running android automotive |
| Mask | A rectangle in the video that will not be considered in the computation of the video difference |
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| Sprint # | Sprint goal |
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| 1 | None |
| 2 | None |
| 3 | None |
| 4 | None |
| 5 | Improve functionallity of Library 1 and 2 and setup Library 3 |
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| Sprint | Goal | Feature Name | Est. Size | Est. Remaining | Real Size | Real Remaining |
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| Release | | | | | | |
| Total | | | 68 | 68 | | |
| Sprints | | | | | | |
| 1 | Sprint 1 | | 0 | 68 | 0 | 68 |
| 2 | Sprint 2 | Setup Project | 9 | 68 | 11 | 68 |
| 3 | Sprint 3 | Input and Output of Library 1 and 2 | 21 | 59 | 16 | 57 |
| 4 | Sprint 4 | Data Processing of Library 1 and 2 | 20 | 38 | 19 | 41 |
| 5 | Sprint 5 | Expand Library 1 and 2 and Setup Library 3 | 18 | 18 | 0 | 22 |
| Features | | | | | | |
| 1 | Sprint 1 | | | | | |
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| 2 | Sprint 2 | Set up code guidelines for the project | 2 | | 3 | |
| | | Setup Code Base for Library 2 | 5 | | 3 | |
| | | Import for frame diff (Library 2) | 2 | | 5 | |
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| 3 | Sprint 3 | Computation of the frame diff (Library 2) | 3 | | 5 | |
| | | Data Input API (Library 1) | 5 | | 2 | |
| | | Setup Code Base for Library 1 | 5 | | 3 | |
| | | Adjust Input of Library 1 | 3 | | 2 | |
| | | build demo system for Library 1 | 3 | | 3 | |
| | | Export of the frame diff video file (Library 2) | 2 | | 1 | |
| 4 | Sprint 4 | compute added and deleted frames (Library 2) | 8 | | 8 | |
| | | Data Processing (Library 1) | 3 | | 3 | |
| | | Setup Tests (Library 2) | 3 | | 3 | |

| Sprint | Goal | Feature Name | Est. Size | Est. Remaining | Real Size | Real Remaining |
|--------|----------|---|-----------|----------------|-----------|----------------|
| | | visualize added and deleted screens(Library 2) | 3 | | 3 | |
| | | Data Export (Library 1) | 3 | | 2 | |
| 5 | Sprint 5 | Check compatibility of Library 1 with Android example project (Library 1) | 3 | | | |
| | | Mask selection (Library 2) | 5 | | | |
| | | Setup Library 3 (Research, design decisions) (Library 3) | 3 | | | |
| | | find storage place for test pictures (Library 1) | 2 | | | |
| | | Read image from filesystem for demo purposes (Library 1) | 2 | | | |
| | | Build a basic GUI (=basic video editing tool) for (Library 3) | 3 | | | |
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Mid-project Burn-down Chart



| Sprint | Goal | Feature Name | Est. Size | Est. Remaining | Real Size | Real Remaining |
|----------|------|--------------|-----------|----------------|-----------|----------------|
| Release | | | | | | |
| Total | | | 0 | 0 | | |
| Sprints | | | | | | |
| 1 | | | 0 | 0 | 0 | 0 |
| 2 | | | 0 | 0 | 0 | 0 |
| 3 | | | 0 | 0 | 0 | 0 |
| ... | | | | 0 | | 0 |
| Features | | | | | | |
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| # | Feature Definition of Done | Sprint Release Definition of Done | Project Release Definition of Done |
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| | Created a feature branch | Project builds (Library 1 builds within Android environment) | UI has been manually tested |
| | Implemented the functionality | All tests run successful | User, design and build documentation is finished |
| | Opened pull request and assigned reviewer | Readme has been adjusted if necessary | Project builds (Library 1 builds within Android environment) |
| | If necessary: required changes are implemented | Version has been tagged | All tests run successful |
| | Deleted feature branch | User, design and build documentation has been updated | Approved manually from every team member |
| | If necessary: Component Test has been written | | |
| | Code review has been completed and code has been merged | | |
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| Last Name | First Name | Value | | | | | |
|------------|------------|-------|--|------|------------------|--|--|
| Frieß | Tobias | | | 5.00 | OK | | |
| Günther | Luis | 5 | | | | | |
| Kilicaslan | Alper | 5 | | | | | |
| Kriese | Anton | 5 | | | | | |
| Kurz | Noah | | | 0 | No size | | |
| Mechs | Lukas | | | 1 | Trivial size | | |
| Novotnyy | Petro | 5 | | 2 | Small size | | |
| Sasse | Simon | 5 | | 3 | Medium size | | |
| Seitz | Fabian | 5 | | 5 | Large size | | |
| | | | | 8 | Very large size | | |
| | | | | 13 | Too large (size) | | |
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