AMOS P4 - Planning Document Project Data

| Project Name                 | Kubernetes Inventory Taker   |
|------------------------------|--|
| Online team meeting          | https://fau.zoom.us/j/66067362855  |
| Production system (if any)   | not available  |
| Test system (if any)         | not available  |
| GitHub repository            | https://github.com/amosproj/amos2023ss04-kubernetes-inventory-taker  |
| GitHub feature board         | amos2023ss04-feature-board (github.com)  |
| GitHub impediments backlog   | amos2023ss04-impediments-backlog (github.com)  |
| Team T-shirt (white, male)   | https://www.shirtinator.de/t-shirts/gestalten/t-shirt-bedrucken#/load/share/87425b24-a18c-4528-b35d-81df816ca277 |
| Team T-shirt (black, male)   | https://www.shirtinator.de/t-shirts/gestalten/t-shirt-bedrucken#/load/share/42541114-1bf4-4ca6-89c2-2040abfcfe20 |
| Team T-shirt (white, female) | https://www.shirtinator.de/t-shirts/gestalten/t-shirt-bedrucken#/load/share/05d839cc-d89e-4063-a1e2-a2ddb9deff98 |
| Team T-shirt (black, female) | https://www.shirtinator.de/t-shirts/gestalten/t-shirt-bedrucken#/load/share/077e16f6-e925-4331-9371-fb165b676607 |
| Additional materials         |  |
|                              |  |
|                              |  |
|                              |  |

AMOS P4 - Planning Document Project Team

| Last Name | First Name     | GitHub User Name | Email Address                  |
|-----------|----------------|------------------|--------------------------------|
| Degen     | Jan            | jandegen         | jan.degen@fau.de               |
| Kramer    | Philipp        | PhlppKrmr        | philipp.kramer@fau.de          |
| Zabka     | Stefan         | vringar          | zabka@campus.tu-berlin.de      |
| Jochens   | Nikolas        | njochens         | nj@andaco.de                   |
| Ali       | Muhammad Fahad | muhdfahadali     | mfahad.ali@fau.de              |
| Gehrlein  | Lucas          | lifesbest23      | I.gehrlein@campus.tu-berlin.de |
| Wiesend   | Simon          | smnws            | simon.wiesend@fau.de           |
| Kwiatek   | Anna           | IceFlovver       | anna.kwiatek@fau.de            |
| Aziri     | Ali            | freefreep        | ali.aziri@campus.tu-berlin.de  |
|           |                |                  |                                |
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AMOS P4 - Planning Document

Role Assignments

| #  | Meeting Day | Product Owner             | Software Developer | Release Manager | Scrum Master | Comment       |
|----|-------------|---------------------------|--------------------|-----------------|--------------|---------------|
| 1  | 2022-10-19  | Philipp Kramer, Jan Degen | Everyone else      | N/A             | Anna Kwiatek |               |
| 2  | 2022-10-26  | Philipp Kramer, Jan Degen | Everyone else      | Lucas Gehrlein  | Anna Kwiatek |               |
| 3  | 2022-11-02  | Philipp Kramer, Jan Degen | Everyone else      | Stefan Zabka    | Anna Kwiatek |               |
| 4  | 2022-11-09  | Philipp Kramer, Jan Degen | Everyone else      | Stefan Zabka    | Anna Kwiatek |               |
| 5  | 2022-11-16  | Philipp Kramer, Jan Degen | Everyone else      | Ali Aziri       | Anna Kwiatek |               |
| 6  | 2022-11-23  | Philipp Kramer, Jan Degen | Everyone else      | tbd.            | Anna Kwiatek |               |
| 7  | 2022-11-30  | Philipp Kramer, Jan Degen | Everyone else      | tbd.            | Anna Kwiatek | Mid-term due  |
| 8  | 2022-12-07  | Philipp Kramer, Jan Degen | Everyone else      | tbd.            | Anna Kwiatek |               |
| 9  | 2022-12-14  | Philipp Kramer, Jan Degen | Everyone else      | tbd.            | Anna Kwiatek |               |
| 10 | 2023-01-11  | Philipp Kramer, Jan Degen | Everyone else      | tbd.            | Anna Kwiatek |               |
| 11 | 2023-01-18  | Philipp Kramer, Jan Degen | Everyone else      | tbd.            | Anna Kwiatek |               |
| 12 | 2023-01-25  | Philipp Kramer, Jan Degen | Everyone else      | tbd.            | Anna Kwiatek |               |
| 13 | 2023-02-01  | Philipp Kramer, Jan Degen | Everyone else      | tbd.            | Anna Kwiatek |               |
| 14 | 2023-02-08  | Philipp Kramer, Jan Degen | Everyone else      | tbd.            | Anna Kwiatek | Demo day!     |
| 15 | 2023-02-15  | Philipp Kramer, Jan Degen | Everyone else      | tbd.            | Anna Kwiatek | Retrospective |
|    |             |                           |                    |                 |              |               |
|    |             |                           |                    |                 |              |               |
|    |             |                           |                    |                 |              |               |

AMOS P4 - Planning Document Team Contract

|                         | - Get in touch with Kubernetes, Docker - Everyone feels comfortable working with it - Earning something  |
|-------------------------|--|
|                         | - Deliver working application  |
| Goals                   | - Satisfy the client - We succeed as a team or we fail as a team   |
| Godis                   | - We succeed as a team of we fall as a team  |
|                         | - Create meeting protocol, maintainer is the current release manager - Zoom for Teammeeting 12:30  Dept you Zoom Chat instead you Matterment channel Teammeeting |
| Meeting norms           | - Dont use Zoom Chat, instead use Mattermost channel <u>Teammeeting</u> - Stay within meeting schedule, dont extend meetings heavily                             |
|                         |  |
|                         | <ul> <li>- Help each other</li> <li>- Main branch is runnable</li> <li>- No direct pushes to main</li> </ul>   |
|                         | - Code is reviewed by other software developers  |
| Working norms           | - Everyone picks up open active topics proactivly - Every developer has to do at least 1 story point per sprint  |
| Working norms           | - Every developer has to do at least i story point per sprint  |
|                         | - Decline meetings if you're not able to joiin - Inform team if you're late  |
| Coordination norms      | - Use comments on GitHub issues for coordination on user stories   |
|                         | - Mattermost for team internl communication  |
|                         | - We interact polity and respectfully with each other  |
|                         | - Everyone can always speak up and state their mind  |
| Communication norms     | - In case of problems talk to each other - Cameras are always on with happy faces  |
| Communication norms     | - Carrieras are always on with happy faces   |
|                         | - Less tasks for people with exams   |
|                         | - Majority vote for hard decisions   |
| Consideration norms     | - Every opinion is weighted equally  |
|                         | - Perform retrospective after sprints  |
| Cont. improvement norms | - Talk openly about what went wrong respectful manner  |
|                         |  |
| Rewards                 | - Good sprints give research budgets which is spent on reasearch project related stuff   |
| Constinue               | Cod amilava farilata magala  |
| Sanctions               | - Sad smileys for late people  |
| Signature               | Jan Degen  |
| 3                       | 1  |

AMOS P4 - Planning Document Team Contract

| Stefan Zabka                     |
|----------------------------------|
| Muhammad Fahad Ali               |
| Lucas Gehrlein                   |
| Nikolas Jochens<br>Simon Wiesend |
| Simon Wiesend                    |
| Philipp Kramer Anna Kwiatek      |
| Anna Kwiatek                     |
|                                  |
|                                  |
|                                  |
|                                  |

AMOS P4 - Planning Document Product Goal

| Product Vision   | Project Mission  |  |  |
|--|--|--|--|
| Our vision is to create a tool that empowers DevOps teams to manage their Kubernetes clusters with ease, providing them with a single platform for inventory visibility, deep insights, real-time analytics, and intelligent monitoring and alerting. With KIT, teams can optimize their resources and streamline their operations, resulting in faster deployment times, better performance, and happier customers. | Project Mission  Product Mission for KIT: Simplifying Kubernetes Management and Monitoring for DevOps Teams  At KIT (Kubernetes Inventory Taker), our mission is to simplify Kubernetes management and monitoring for DevOps teams. We want to provide a user-friendly tool that gives you a clear, real-time view of your Kubernetes resources, from deployments and pods to containers, so you can easily manage and optimize your infrastructure.   |  |  |
|  | Here's what we're all about: - Inventory Visibility: We'll provide you with a comprehensive view of your Kubernetes inventory, showing you the state, health, and configuration of your deployments, pods, and containers in a single, easy-to-navigate interface. No more complex logs or guesswork - we'll make it simple and intuitive for you to understand your resources Insights and Analysis: We'll help you gain deep insights into your Kubernetes resources with powerful analytics and analysis. Get real-time information on resource |  |  |
|  | utilization, health status, and configuration changes, so you can quickly identify and resolve issues, track changes over time, and optimize your resources for better performance.  - User-friendly Web Frontend: We believe in making KIT easy to use and visually   |  |  |

AMOS P4 - Planning Document Product Glossary

| Term | Definition  |
|------|---|
| KIT  | Project Name short for Kubernetes Inventory Taker |
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AMOS P4 - Planning Document

Mid-Project Release plan

|         |        |      |              |           | Est.      |           | Real      |
|---------|--------|------|--------------|-----------|-----------|-----------|-----------|
| Sprint  | Theme  | Goal | Feature Name | Est. Size | Remaining | Real Size | Remaining |
| Release |        |      |              |           |           |           |           |
| Release | 3      |      |              |           |           |           |           |
|         | Total  |      |              | 0         | 0         |           |           |
|         | I Otal |      |              | 0         | 0         |           |           |
| Sprints |        |      |              |           |           |           |           |
|         |        |      |              |           |           |           |           |
| 1       |        |      |              | 0         | 0         | 0         | 0         |
| 2       |        |      |              | 0         | 0         | 0         | 0         |
| 3       |        |      |              | 0         | 0         | 0         | 0         |
|         |        |      |              |           | 0         |           | 0         |
| _       |        |      |              |           |           |           |           |
| Feature | S      |      |              |           |           |           |           |
| 4       |        |      |              |           |           |           |           |
| 1       |        |      |              |           |           |           |           |
|         |        |      |              |           |           |           |           |
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AMOS P4 - Planning Document Final Project Release plan

|          |       |      |              |           | Est.      |           | Real      |
|----------|-------|------|--------------|-----------|-----------|-----------|-----------|
| Sprint   | Theme | Goal | Feature Name | Est. Size | Remaining | Real Size | Remaining |
|          |       |      |              |           |           |           |           |
| Release  |       |      |              |           |           |           |           |
|          |       |      |              |           |           |           |           |
|          | Total |      |              | 0         | 0         |           |           |
|          |       |      |              |           |           |           |           |
| Sprints  |       |      |              |           |           |           |           |
| _        |       |      |              | _         | _         | _         | _         |
| 1        |       |      |              | 0         | 0         | 0         | 0         |
| 2        |       |      |              | 0         | 0         | 0         | 0         |
| 3        |       |      |              | 0         | 0         | 0         | 0         |
|          |       |      |              |           | 0         |           | 0         |
| Fa atuus | _     |      |              |           |           |           |           |
| Feature  | 5     |      |              |           |           |           |           |
| 1        |       |      |              |           |           |           |           |
| 1        |       |      |              |           |           |           |           |
|          |       |      |              |           |           |           |           |
|          |       |      |              |           |           |           |           |
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| 2        |       |      |              |           |           |           |           |
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AMOS P4 - Planning Document Definition of Done

| F | Feature Definition of Done                                      | Sprint Release Definition of Done                | Project Release Definition of Done    |
|---|---|--|---------------------------------------|
|   |   | sprint-XX-release-candidate release created and  |                                       |
| ( | Colours match with color scheme                                 | marked as pre-release                            | All required features are implemented |
| I | implementation is unit tested                                   | New Docker images available at DockerHub         | User manual is ready                  |
| J | Unit test coverage above 70%                                    | Sprint Review completed                          | Technical manual is ready             |
| ( | Code documentation updated (jsdoc or godoc?)                    | Sprint Retrospective completed                   | No bugs                               |
|   |   | Pull request to "main" branch merged & closed if |                                       |
| ( | Changes to database documented at Confluence- Database scheme   | there is a new release                           |                                       |
| ( | Changes to architecture documented at Confluence - Architecture | Real size set for each closed user story         |                                       |
|   |   |  |                                       |
|   | Feature has been fully implemented                              |  |                                       |
| A | All acceptance criteria were met                                |  |                                       |
| I | Product owner approved features                                 |  |                                       |
| A | All tests are passing   |  |                                       |
| F | Pull request to "develop" branch is merged & closed             |  |                                       |
| I | Bill of materials is updated with new dependencies              |  |                                       |
|   |   |  |                                       |
|   |   |  |                                       |
|   |   |  |                                       |
|   |   |  |                                       |
|   |   |  |                                       |

AMOS P4 - Planning Document Documentation

| Type | Link / reference |
|------|------------------|
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AMOS P4 - Planning Document

Bill of Materials

| #  | Context  | Name                      | Version  | License    | Comment   |
|----|----------|---------------------------|----------|------------|---|
| 1  | Proxy    | Kubernetes Client Library | v0.27.1  | Apache-2.0 | https://github.com/kubernetes/client-go/            |
| 2  | Frontend | Types                     | multiple | MIT        | https://github.com/DefinitelyTyped/DefinitelyTyped/ |
| 3  | Frontend | Next.js                   | 13.3.4   | MIT        | https://github.com/vercel/next.js                   |
| 4  | Frontend | typescript                | 5.0.4    | Apache-2.0 | https://github.com/microsoft/TypeScript             |
| 5  | Frontend | tailwindcss               | 3.3.2    | MIT        | https://github.com/tailwindlabs/tailwindcss         |
| 6  | Frontend | swr                       | 2.1.5    | MIT        | https://github.com/vercel/swr                       |
| 7  | Frontend | react                     | 18.2.0   | MIT        | https://github.com/facebook/react                   |
| 8  | Frontend | postcss                   | 8.4.23   | MIT        | https://github.com/postcss/postcss                  |
| 9  | Frontend | eslint                    | 8.39.0   | MIT        | https://github.com/eslint/eslint                    |
| 10 | Frontend | autoprefixer              | 10.4.14  | MIT        | https://github.com/postcss/autoprefixer             |
|    |          |                           |          |            |   |
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AMOS P4 - Planning Document Planning Poker

| Last Name | First Name     | Value |       |                  |  |
|-----------|----------------|-------|-------|------------------|--|
| Degen     | Jan            |       | #DIV/ | #DIV/            |  |
| Kramer    | Philipp        |       |       |                  |  |
| Zabka     | Stefan         |       | 0!    | 0!               |  |
| Jochens   | Nikolas        |       |       |                  |  |
| Ali       | Muhammad Fahad |       | 0     | No size          |  |
| Gehrlein  | Lucas          |       | 1     | Trivial size     |  |
| Wiesend   | Simon          |       | 2     | Small size       |  |
| Kwiatek   | Anna           |       | 3     | Medium size      |  |
| Aziri     | Ali            |       | 5     | Large size       |  |
|           |                |       | 8     | Very large size  |  |
|           |                |       | 13    | Too large (size) |  |
|           |                |       |       |                  |  |
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