

Product and Presentation (PA Component)

Databases and Web Applications Laboratory (LBAW)
Bachelor in Informatics Engineering and Computation (L.EIC)

Sérgio Nunes
Dept. Informatics Engineering
FEUP · U.Porto

Product and Presentation (PA) Component

PA: Product and Presentation

- This component includes the artifacts related to the delivery of the final product.
- **Deadline is the same for all groups**, first week of January — 3rd Jan.
 - But you can/should (!) submit earlier.
- *Presentation dates **tentative**: 5th and 6th of January.*
 - Still to be confirmed.

A9: Product

A9: Product

- This artifact includes:
 - implemented features;
 - updated openAPI for the product;
 - instructions for installation and use;
 - access credentials.
- The product version considered for evaluation is the one available on the group's GitLab Container Registry by the delivery deadline.
- That container will be made available at <http://lbaw22gg.lbaw.fe.up.pt> and will be used, from that URL, for the demonstration (A10). No update to the image at the production machine will be done after the submission deadline.

A9: Product

- In detail, the product should:
 - identify the development status (in %) of each of the requirements (user stories) initially set in A2 — expected high and medium priority user stories;
 - describe the web architecture of the product with an updated OpenAPI specification;
 - describe the type of assistance supported by the web application (context-sensitive help, notifications, help pages, etc.);
 - describe and briefly justify the revisions introduced to the initially defined requirements and architecture.

A9: Product Evaluation

- The product is evaluated by observing the operation of the developed web application and the delivered code.
- The following items will be assessed:
 - Product usability — accessibility, usability of interfaces and online assistance (e.g. help online).
 - The features implemented — minimum set of features considered essential.
 - The architecture and the use of technology — modularity of the solution, the quality of the source code, proper use of languages and technologies.
 - The robustness of the product — absence of failures during operation, error handling (the access to the database and business logic in PHP), form validation in HTML and JS.

A9: Checklist (1/4) - Product Information

| A9. Product | | |
|---------------------|-----|--|
| Artefact | 1.1 | The artefact reference and name are clear |
| | 1.2 | The goal of the artefact is briefly presented (1, 2 sentences) |
| Product information | 2.1 | List of implemented user stories are included |
| | 2.2 | All user stories have team members associated |
| | 2.3 | All user stories have completion state information (as a percentage) |
| | 2.4 | Revision history section with changes to A2 and A7 is included |
| | 2.5 | Link to the final release source code is included |
| | 2.6 | Docker command to start the image from GitLab Container Registry is included |
| | 2.7 | URL to the product at the production machine is included |
| | 2.8 | Credentials for different roles are included |
| | 2.9 | "README.md" is updated with the Docker command, URL and credentials |

A9: Checklist (2/4) - Features

| | | |
|-----------------|-------------|--|
| Features | 3.1 | Contextual help is supported |
| | 3.2 | About page is implemented |
| | 3.3 | Input validation on the client (frontend) is implemented |
| | 3.4 | Input validation on the server (backend) is implemented |
| | 3.5 | All high and medium priority user stories are implemented |
| | 3.6 | User authentication is implemented |
| | 3.7 | User registration is implemented |
| | 3.8 | User account deletion is implemented |
| | 3.9 | Password recovery is implemented |
| | 3.10 | User access control is implemented |
| | 3.11 | Administration features are implemented |
| | 3.12 | Full-text search is implemented |
| | 3.13 | Full-text search with multiple weighted fields is implemented |
| | 3.14 | Advanced search using filters is implemented |
| | 3.15 | AJAX interactions are implemented |
| | 3.16 | Feedback messages (e.g. errors, notifications) are implemented |

A9: Checklist (3/4) - Architecture and Technologies

| | | |
|--|-------------|---|
| Architecture and technologies | 4.1 | OpenAPI specification in YAML for the final product is included |
| | 4.2 | All non-essential LBAW template code was removed |
| | 4.3 | List of additional libraries or packages used is included |
| | 4.4 | Non-authorized libraries or packages are not used |
| | 4.5 | Complex code blocks are explained with comments |
| | 4.6 | Unnecessary code removed (e.g. commented code, debug code) |
| | 4.7 | No temporary files are left on the final product |
| | 4.8 | Laravel routes are correctly used |
| | 4.9 | Laravel controllers are correctly used |
| | 4.10 | Laravel templates are correctly used |
| | 4.11 | Laravel data access is correctly used |
| | 4.12 | Laravel policies are correctly used |
| | 4.13 | HTML validation report is included |
| | 4.14 | CSS validation report is included |
| | 4.15 | HTML semantic elements are used |
| | 4.16 | Minimal redundancy in CSS used (i.e. use cascading features) |
| | 4.17 | Product not vulnerable to URL manipulation |
| | 4.18 | Product not vulnerable to user input manipulation |
| | 4.19 | Internal errors are handled |
| | 4.20 | Laravel APP_DEBUG variable is set to TRUE in .env |

A9: Checklist (4/4) - Product Usability and Accessibility

| | | |
|--|------------|--|
| Product usability and accessibility | 5.1 | Usability checklist report is included |
| | 5.2 | Accessibility checklist report is included |
| | 5.3 | Responsive design is implemented |

A10: Presentation and Discussion

A10: Presentation and Discussion

- This artifact includes the promotion, a presentation, the demonstration of the product, and a discussion of the developed features.
- The promotion should include a short 2-minutes video, showcasing the main features of the product.
- For the presentation, the group must follow a presentation script (not to be delivered), and demonstrate the product accessing the official URL at the production machine: <https://lbaw22gg.lbaw.fe.up.pt>. The web application will be available until the grades are published.
- Each group has a 20 minutes slot: 15 min for demonstration + 5 min for questions.

A10: Checklist (1/2)

| A10. Presentation | | |
|-------------------|-----|--|
| Artefact | 1.1 | The artefact reference and name are clear |
| | 1.2 | The goal of the artefact is briefly presented (1, 2 sentences) |
| Materials | 2.1 | Brief product presentation is included |
| | 2.2 | URL to the product is included |
| | 2.3 | URL to the video is included |
| | 2.4 | Video includes textual or audio descriptions |
| | 2.5 | Product data is realistic (e.g. no 'lorem ipsum' style) |

A10: Checklist (2/2)

| | | |
|---------------------------|-------------|--|
| Presentation | 3.1 | Application is readily available in production |
| | 3.2 | The presentation is well structured |
| | 3.3 | Communication is clear |
| | 3.4 | The time limit is not exceeded |
| | 3.5 | Main features are shown |
| | 3.6 | No bugs nor unexpected fails happen |
| | 3.7 | Answers during the discussion are clear |
| Features Presented | 4.1 | Authentication & Authorisation |
| | 4.2 | CRUD operations |
| | 4.3 | User input validation on client (HTML, JS) |
| | 4.4 | User input validation on server |
| | 4.5 | User account creation |
| | 4.6 | User account deletion |
| | 4.7 | Password recovery |
| | 4.8 | Help features (contextual and others) |
| | 4.9 | AJAX calls |
| | 4.10 | Full-text search |
| | 4.11 | User administration |