| Project Name | Mumbi - Personalized Playtime |
| --- | --- |
| | |
| Online team meeting | https://fau.zoom-x.de/j/67240113065 |
| | |
| Production system (if any) | ... |
| Test system (if any) | ... |
| | |
| GitHub repository | https://github.com/amosproj/amos2024ws04-personalized-play |
| GitHub feature board | https://github.com/orgs/amosproj/projects/73/views/2 |
| GitHub imp-squared backlog | https://github.com/orgs/amosproj/projects/77 |
| | |
| Team T-shirt (white) | https://www.shirtinator.de/s/43fUAI0NT56hWjNjoYQQqg |
| Team T-shirt (black) | https://www.shirtinator.de/s/JQ9cmxYyQ7KcEvpXKljO-w |
| | |
| Additional materials | Shared Drive Link: https://drive.google.com/drive/folders/1fMtj2E90bbCLx5iGJj6nXyAKku2Q0npP?usp=sharing |
| | Shared Miro Board: https://miro.com/welcome/TzdHM3o2OG1VNG92cEhOQU04TjBFZXNUZ2xjcFk4ZVFONHdqckdHRHRJVmVMSEJwUGNIUHRWWVN3VmVESGY0Q3wzNDU4NzY0NTg1NzM0NTkxOTUxfDE=?share_link_id=817734118424 |
| Team maling list | oss-amos-proj4@lists.fau.de |
| | |
| | |

| Last Name | First Name | GitHub User Name | Email Address |
|---|---|---|---|
| Bennani | Abderrahmane | AbderrahmaneBennani | Abderrahmane.Bennani@fau.de |
| Hirschbeck | Anna | AnnaH3003 | anna.hirschbeck@fau.de |
| Pervana | Sara | saramakishti | sara.pervana@campus.tu-berlin.de |
| Demirhan | Kübra | kuebrademirhan | kuebra.demirhan@fau.de |
| Faldu | Rushi Bhupendrabhai | Rushi-faldu | rushifaldu1@gmail.com |
| Baier | Frederick | frederickbaier | f.baier@campus.tu-berlin.de |
| Samarakoon | Shanaka Anuradha | shanaka95 | shanaka95@gmail.com |
| Rudani | Vivek | vivekrudani | vivekrudani148@gmail.com |
| Vadaliya | Preet | preetvadaliya | preet.vadaliya@fau.de |
| Bhesaniya | Yash | yashbhesaniya | yash.bhesaniya@fau.de |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| # | Meeting Day | Product Owners | Software Developer | Release Manager | Scrum Master | Comment |
|---|---|---|---|---|---|---|
| 1 | 2024-10-16 | N/A | Everyone else | N/A | Anna Hirschbeck | |
| 2 | 2024-10-23 | Sara Pervana | Everyone else | | Anna Hirschbeck | |
| 3 | 2024-10-30 | Sara, Rushi | Everyone else | Preet Vadaliya | Anna Hirschbeck | |
| 4 | 2024-11-06 | Sara, Rushi | Everyone else | Shanaka Anuradha Samarakoon | Anna Hirschbeck | |
| 5 | 2024-11-13 | Sara, Rushi | Everyone else | N/A | Anna Hirschbeck | |
| 6 | 2024-11-20 | Sara, Rushi | Everyone else | Abderrahmane Bennani | Anna Hirschbeck | |
| 7 | 2024-11-27 | Sara, Rushi | Everyone else | Vivek Rudani | Anna Hirschbeck | Mid-term due |
| 8 | 2024-12-04 | Sara, Rushi | Everyone else | kubra Demirhan | Anna Hirschbeck | |
| 9 | 2024-12-11 | Sara, Rushi | Everyone else | Frederick | Anna Hirschbeck | |
| 10 | 2024-12-18 | Sara, Rushi | Everyone else | Shanaka Anuradha Samarakoon | Anna Hirschbeck | |
| 11 | 2025-01-08 | Sara, Rushi | Everyone else | | Anna Hirschbeck | |
| 12 | 2025-01-15 | Sara, Rushi | Everyone else | | Anna Hirschbeck | |
| 13 | 2025-01-22 | Sara, Rushi | Everyone else | | Anna Hirschbeck | |
| 14 | 2025-01-29 | Sara, Rushi | Everyone else | | Anna Hirschbeck | Demo day! |
| 15 | 2025-02-05 | Sara, Rushi | Everyone else | | Anna Hirschbeck | Retrospective |
| | | | | | | |

Product owners, software developers, and Scurm Master are set and ideally don't change over time; the critical part is the Release Manager role you need to define here

| | |
|---|---|
| | - one team goal is to have efficient team meetings<br>- another goal is to finish the project successfully and make our industry partner content<br>- to gain experience in agile software development<br>- to have a positive happiness chart by the end of the project<br>- to develop clean and maintainable code |
| | |
| **Meeting norms** | - it is acceptable to join max 5 minutes late<br>- if a person is more than 5 minutes late, he / she must let the team know in advance |
| | |
| **Working norms** | - technical decisions should be made by SD in their respective channel<br>- tickets should only be included if they contain a clear user stoy and details concerning the technical implementation<br>- ideally all disagreements should be solved through discussion to reach a mutual solution<br>- criticism should always be constructive and never personal<br>- SD should work independently but we can always ask for help<br>- keep good documentation |
| | |
| **Coordination norms** | - POs will lead the meeting as allocated in the planning document<br>- the PO which is not leading the respective part of the meeting is responsible for keeping track<br>- SD choose which work they take on and make sure that everything is covered as required |
| | |
| **Communication norms** | - communicating via discord<br>- main communication channel is discord / WhatsApp just optional as a backup<br>- acknoledgement of message within 24 hours<br>- in case of illness communicate as soon as possible via discord<br>- there should be a special channel just for the SD to communicate and discuss technical issues |
| | |
| **Consideration norms** | - disagreements that affects the whole team / project should be communicated publicly and voted on in order to be solved<br>- disagreements concerning technical issues should be discuessed among the SD |
| | |
| **Cont. improvement norms** | - at leat one review is required to merge to main branch<br>- feedback on quality should also be given via comments |
| | |
| **Rewards** | - give compliments and praise team (members) |
| | |
| **Sanctions** | - if a team member fails to to their obligations, a warning will be given<br>- if this should happen again, the team member needs to explain their reasons and state which measures should be taken to ensure it does not happen again |
| | |
| **Signatures** | |
| | |
| Scrum Master | Anna Hirschbeck |

| Product owner | Sara Pervana |
|---|---|
| Product owner | Rushi Bhupendrabhai Faldu |
| Software developer | Abderrahmane Bennani |
| Software developer | Yash Bhesaniya |
| Software developer | Kübra Demirhan |
| Software developer | Vivek Rudani |
| Software developer | Shanaka Anuradha Samarakoon |
| Software developer | Frederick Baier |
| Software developer | Preet Vadaliya |
| | |
| | |
| | |
| | |
| | |

| Term | Definition |
| --- | --- |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

| Product Vision | Project Mission |
|---|---|
| Our vision is to revolutionize family playtime by integrating neuroscience, child development, and advanced AI technology to create interactive experiences that improve lifelong skills and build strong family connections. We envision a world where every family can transform everyday moments into meaningful opportunities for growth, and joyful play, using the power of AI to adapt to the needs of every child and caregiver. | Our mission is to build a smart, intuitive AI agent that makes high-quality, research-backed play accessible to all families. By using everyday household items and existing toys, MUMBI provides personalized, adaptive play experiences that encourage cognitive, physical, social, and emotional development in young children, while supporting parents in creating meaningful connections. Our focus is on integrating naturally into daily life, being accessible to all parents, and providing scientific integrity, ensuring that every experience is backed by neuroscience and designed for real-world impact. |

| Sprint # | Sprint goal |
| --- | --- |
| 1 | None |
| 2 | None |
| 3 | None |
| 4 | Optional |
| 5 | Finalize the app's UI design based on the guidelines and connect the first half of the onboarding flow questions in the app. |
| 6 | Improve and align the UI on the onboarding flow and prepare for mid-project release |
| 7 | complete the onboarding flow |
| 8 | Setup the multi agent for Playtime session and get user feedback after each playtime |
| 9 | integrate AI agent with button functionality. |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| | |
| | |
| | |

| | Goal | Feature Name | Est. Size | Est. Remaining | Real Size | Real Remaining |
|---|---|---|---|---|---|---|
| **Release** | | | | | | |
| | | | | | | |
| **Total** | | | 134 | | 70 | |
| | | | | | | |
| **Sprints** | | | | | | |
| | | | | | | |
| 1 | Initial documentation requirements and introduction to the project | | 1 | 133 | 1 | |
| 2 | Setting up the development environment of the project and initialize software architecture | | 27 | 106 | 21 | |
| 3 | Setup the auth flow and main screens | | 8 | 98 | 8 | |
| 4 | Develop the onboarding questions flow | | 32 | 66 | 26 | |
| 5 | Finalize the app's UI design based on the guidelines and connect the first half of the onboarding flow questions in the app | | 21 | 45 | 14 | |
| 6 | Improve and align the UI on the onboarding flow and prepare for mid-project release | | 45 | 0 | | |
| **Features** | | | | | | |
| | | | | | | |
| **1** | **Initial documentation requirements and introduction to the project** | | | | | |
| | | Host first meeting with IP | 1 | | 1 | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| **2** | **Setting up the development environment of the project and initialize software architecture** | | | | | |
| | | Setup Development Environment | 13 | | 8 | |
| | | Initialize Software Bills of Materials (SBoM) | 2 | | 1 | |
| | | Rendering of default README and CI documentation | | | | |
| | | Design team T-shirt and upload in GitHub | 2 | | 1 | |
| | | Design team logo and upload in GitHub | 2 | | 2 | |
| | | Add CI/CD Workflows for Release Drafter and Checkout Instructions | | | | |
| | | Create the summary of underlying tech stack | 1 | | 1 | |
| | | Create the diagram of runtime components | 3 | | 3 | |
| | | Create the diagram of code components | 2 | | 3 | |
| | | Create a textual explanation of diagrams and choices | 2 | | 2 | |
| **3** | Setup the auth flow and main screens | | | | | |
| | | FEAT: SignUp page | 8 | | 8 | |
| | | | | | | |
| | | | | | | |
| **4** | Develop the onboarding questions flow | | | | | |
| | | [Onboarding flow] Create welcome screen after first-time user authentication | 3 | | 2 | |
| | | [Onboarding Flow] Find Lottie animations/pictures | 3 | | | |
| | | [Onboarding flow] Get contextual questions from user - {age of kids} | 3 | | 3 | |
| | | [Onboarding flow] Get contextual questions from user - {energy level} | 3 | | 3 | |
| | | [Onboarding flow] Get contextual questions from user - {no. of kids} | 3 | | 3 | |
| | | [Onboarding flow] Get playtime related questions - {type of play} | 5 | | 5 | |
| | | [Onboarding flow] Update the interactive labels (text) | 2 | | 2 | |
| | | Setup User Login and Signup (carryover from sprint 3) | 8 | | 8 | |
| | | Update primary and secondary colors in the global configuration | 2 | | 0 | |
| **5** | Finalize the app's UI design based on the guidelines and connect the first half of the onboarding flow questions in the app | | | | | |
| | | [Onboarding flow] Add option to move to the next question | 5 | | | |
| | | [Onboarding flow] Create loading screen before playtime activity suggestion | 3 | | 2 | |
| | | [Onboarding flow] Get playtime questions from user - {duration} | 5 | | 5 | |
| | | Create a video recording for the whole build process | 5 | | 5 | |
| | | FEAT: Add playtime onboarding question | | | | |
| | | FEAT: Add Welcome Screen | 3 | | 2 | |
| | | FEAT: Base App navigation and User Auth with custom Formik form component | | | | |
| | | FEAT: Energy Level Page | | | | |
| | | FEAT: Number Of Kids Question and Onboarding Screen | | | | |
| | | Feat/app auth flow user age | | | | |
| | | FIX: Add missing dependency for slider | | | | |
| | | FIX: The next button in the onboarding screen is now disabled if the current question is not answered | | | | |

| | Goal | Feature Name | Est. Size | Est. Remaining | Real Size | Real Remaining |
|---|---|---|---|---|---|---|
| | | | 3 | | | |
| 6 | Improve and align the UI on the onboarding flow and prepare for mid-project release | Improve UI for [energy level] question | 3 | | | |
| | | create project documentation | 2 | | | |
| | | Improve UI for [type of play] question | 3 | | | |
| | | Improve UI for sign in | 3 | | | |
| | | Improve UI for sign up | 3 | | | |
| | | create and improve UI for [name of user] question | 2 | | | |
| | | Improve UI for [age of kids] | 2 | | | |
| | | Improve UI for welcome screen | 2 | | | |
| | | Improve UI for [duration] question | 2 | | | |
| | | Improve UI for [no. of kids] question | 2 | | | |
| | | create and finish mid-project release plan | 3 | | | |
| | | technical refactor of the onboarding flow | | | | |
| | | tag code for mid-project release | 1 | | | |
| | | update primary and secondary color in global configuration | 2 | | | |
| | | display welcom screen only for first time users | 5 | | | |
| | | improve and test UI for info modal for additional information | 2 | | | |
| | | set the global font of the app to inter | 5 | | | |

| # | Feature Definition of Done | Sprint Release Definition of Done | Project Release Definition of Done |
|---|---|---|---|
| 1 | The feature has been fully implemented, thoroughly tested, and integrated into the app with no critical bugs or performance issues. | All features and tasks planned for the sprint have been implemented, integrated, and tested to confirm they work together, with no major issues or blockers. | The app has been thoroughly tested and functions as intended, handling all expected user inputs and scenarios without critical failures or performance issues. |
| 2 | Manual testing is complete, verifying that the feature meets all acceptance criteria. | A comprehensive manual check confirms that the app builds successfully and all new or updated features are stable and functional. | User experience testing is completed, and the app's design is verified to be aligned with design guidelines. |
| 3 | Big features are documented inside the code, with clear explanations of functionality, usage, and any relevant edge cases. | Ensure that existing functionality has not been negatively impacted by the sprint changes. | Final regression testing ensures that all features work well together and no issues have been introduced in the overall app experience. |
| 4 | The feature has undergone peer review, with the code approved by at least one other team member to ensure quality and maintainability. | The app is ready for deployment, meeting all necessary quality and performance standards. | Design and technical documentation are updated to reflect the final architecture, data flow, and system components. |
| 5 | The feature branch has been successfully merged into the main branch, and the pull request is closed and the branch is deleted. | Sprint release notes are prepared, summarizing new features, enhancements, and bug fixes. | The project release has been approved by product owners and the industry partner. |
| 6 | The feature's UI/UX has been reviewed to ensure consistency and alignment with design guidelines. | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

| Sprint | Goal | Feature Name | Est. Size | Est. Remaining | Real Size | Real Remaining |
|---|---|---|---|---|---|---|
| **Release** | | | | | | |
| | | | | | | |
| **Total** | | | 0 | 0 | | |
| | | | | | | |
| **Sprints** | | | | | | |
| | | | | | | |
| 7 | complete the onboarding flow | | 32 | | | |
| 8 | Setup the multi agent for Playtime session and get user feedback after each playtime | | 34 | | | |
| 9 | integrate AI agent with button functionality. | | 29 | | | |
| 10 | Complete implementing 40% of LLM logic | | 20 | | | |
| 11 | complete implementing 60% of LLM logic | | 20 | | | |
| 12 | complete implementing 80% of LLM logic | | 21 | | | |
| 13 | Complete implementing 100% of LLM logic | | 25 | | | |
| 14 | fix bugs, refactor code and prepare for final project review | | 25 | | | |
| 15 | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| **Features** | | | | | | |
| | | | | | | |
| 7 | complete the onboarding flow | create UI [health consideration] | 5 | | | |
| | | [Onboarding flow] Create UI for Items at hand question | 5 | | 5 | |
| | | Use Gemini API to identify the items on picture taken | 8 | | 8 | |
| | | [Onboarding flow] display items identified when taking pictures | 8 | | 8 | |
| | | [Onboarding flow] create UI for Skills question | 3 | | 3 | |
| | | Set the user data in firebase | 3 | | 5 | |
| | | | | | | |
| | | | | | | |
| 8 | Setup the multi agent for Playtime session and get user feedback after each playtime | [Favourites] create UI to show all saved/favourite activity | 3 | | | |
| | | [Playtime Ends] Create UI after playtime activity ends | 5 | | 5 | |
| | | [Playtime session] Implement 'Stop' button functionality | 3 | | | |
| | | [Home Screen] Create the UI for home screen | 5 | | | |
| | | [Playtime Ends] 'Add to favorites' functionality after an activity session ends | 5 | | | |
| | | [Playtime Ends] Save feedback for each activity in the database | 3 | | 2 | |
| | | [Playtime session] Create UI for Playtime session screeen | 2 | | | |
| | | [Playtime Session] Set-up multi-agent models with Genkit | 8 | | 8 | |
| | | | | | | |
| | | | | | | |
| 9 | integrate AI agent with button functionality. | [Playtime session] Integrate generative AI agent for activity instructions | 13 | | | |
| | | [Playtime ends] Create UI for user to explore more science backed info related to activities | 3 | | | |
| | | [Playtime session] select kids for new playtime session | | | | |
| | | [Playtime session] start a favourite activity by clicking replay | 3 | | | |
| | | [Playtime session] start a new play from home screen | 5 | | | |
| | | [Favourites] Update details for saved/ added to favourites | 5 | | | |
| | | | | | | |
| | | | | | | |

| Sprint | Goal | Feature Name | Est. Size | Est. Remaining | Real Size | Real Remaining |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| 10 | Complete implementing 40% of LLM logic | | 25 | | | |
| 11 | complete implementing 60% of LLM logic | | 25 | | | |
| 12 | complete implementing 80% of LLM logic | | 25 | | | |
| 13 | Complete implementing 100% of LLM logic | | 25 | | | |
| 14 | fix bugs, refactor code and prepare for final project review | | 25 | | | |

| Sprint | Goal | Feature Name | Est. Size | Est. Remaining | Real Size | Real Remaining |
|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

| Type | Link / reference |
|------|------------------|
|      |                  |
|      |                  |
|      |                  |
|      |                  |
|      |                  |
|      |                  |
|      |                  |
|      |                  |
|      |                  |
|      |                  |
|      |                  |
|      |                  |
|      |                  |
|      |                  |
|      |                  |
|      |                  |
|      |                  |

| | sprint 1 | sprint 2 | sprint 3 | sprint 4 | sprint 5 | sprint 6 | sprint 7 | sprint 8 | sprint 9 | sprint 10 | sprint 11 | sprint 12 | sprint 13 | sprint 14 | sprint 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| estimate | 1 | 27 | 8 | 32 | 21 | 45 | 32 | 34 | 29 | | | | | | |

velocity chart

| | sprint 1 | sprint 2 | sprint 3 | sprint 4 | sprint 5 | sprint 6 | sprint 7 | sprint 8 | sprint 9 | sprint 10 | sprint 11 | sprint 12 | sprint 13 | sprint 14 | sprint 15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| estimate remaining | 333 | 306 | 298 | 266 | 245 | 198 | 168 | 134 | 105 | 91 | 70 | 50 | 25 | 0 | |

**Burndown chart**

| Last Name | First Name | Value | | | | | |
|---|---|---|---|---|---|---|---|
| Bennani | Abderrahmane | | | #DIV/0! | #DIV/0! | | |
| Pervana | Sara | | | | | | |
| Faldu | Rushi Bhupendrabhai | | | | | | |
| Demirhan | Kübra | | | | | | |
| Baier | Frederick | | | 0 | No size | | |
| Samarakoon | Shanaka Anuradha | | | 1 | Trivial size | | |
| Vadaliya | Preet | | | 2 | Small size | | |
| Rudani | Vivek | | | 3 | Medium size | | |
| Bhesaniya | Yash | | | 5 | Large size | | |
| | | | | 8 | Very large size | | |
| | | | | 13 | Too large (size) | | |
| | | | | | | | |
| **How to play planning poker** | | | | | | | |
| | | | | | | | |
| 1. Everyone type their number into their value field, don't hit return yet | | | | | | | |
| 2. Someone, perhaps a product owner, count down 3.. 2.. 1.. | | | | | | | |
| 3. Then, everyone hit return to submit their value | | | | | | | |
| | | | | | | | |

| # | Context | Name | Version | License | Comment |
|---|---------|------|---------|---------|---------|
|   | Development | Node.js | v20.14.0 | MIT | Core runtime for backend and development tasks. |
|   | Development | NPM | v10.9.0 | Artistic License 2.0 | Package manager for Node.js dependencies. |
|   | Development | Firebase | v13.23.0 | Apache-2.0 | Backend-as-a-Service (BaaS) for handling data and authentication. |
|   | Development | Expo | v13.22.1 | MIT | Framework for building and deploying React Native apps. |
|   | Development | Typescript | v5.1.3 | Apache-2.0 | Strongly-typed language for improved code quality and maintainability. |
|   | Development | React | v18.2.0 | MIT | Library for building user interfaces, particularly for web applications. |
|   | Development | React Native | v0.74.5 | MIT | Framework for building native mobile applications using React. |
|   |   |   |   |   |   |
|   |   |   |   |   |   |
|   |   |   |   |   |   |
|   |   |   |   |   |   |
|   |   |   |   |   |   |
|   |   |   |   |   |   |
|   |   |   |   |   |   |
|   |   |   |   |   |   |
|   |   |   |   |   |   |
|   |   |   |   |   |   |