**Project Plan**

***Cr8ive***

*Fontys Hogeschool*

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| --- |
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| **Author : Jarno Dijkmans** |

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| 3 | 27-09-2023 | Jarno | Remove Research, End products, sprint meetings, |  |

**Distribution**

|  |  |  |
| --- | --- | --- |
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|  |  |  |
|  |  |  |

Contents

[1. Project assignment 4](#_Toc145488813)

[1.1 Context 4](#_Toc145488814)

[1.2 Problem statement 4](#_Toc145488815)

[1.3 Goal of the project 4](#_Toc145488816)

[1.4 Scope and preconditions 4](#_Toc145488817)

[1.5 Strategy 5](#_Toc145488818)

[1.6 Research questions and methodology 5](#_Toc145488819)

[1.7 End products 6](#_Toc145488820)

[2. Project organisation 7](#_Toc145488821)

[2.1 Stakeholders and team members 7](#_Toc145488822)

[2.2 Communication 7](#_Toc145488823)

[3. Activities and time plan 8](#_Toc145488824)

[3.1 Phases of the project 8](#_Toc145488825)

[3.2 Time plan and milestones 8](#_Toc145488826)

[4. Testing strategy and configuration management 10](#_Toc145488827)

[4.1 Testing strategy 10](#_Toc145488828)

[4.2 Test environment and required resources 10](#_Toc145488829)

[4.3 Configuration management 10](#_Toc145488830)

[5. Finances and risk 11](#_Toc145488831)

[5.1 Project budget 11](#_Toc145488832)

[5.2 Risk and mitigation 11](#_Toc145488833)

# Project assignment

## Context

*Cr8ive is an online home for people who love to create things. It's a place where artists, writers, and other creative individuals can share their work and connect with each other. Within this vibrant community, creative minds can come together to collaborate, offer constructive feedback, express appreciation for each other's work, and serve as a source of inspiration. Additionally, businesses can join the platform to connect and collaborate with these creative users.*

## Problem statement

In the current digital landscape, individuals with creative talents often face the challenge of limited opportunities to showcase their work, collaborate effectively, and gain recognition for their contributions. Likewise, businesses seeking innovative solutions and fresh perspectives encounter difficulties in identifying and connecting with creative minds. This gap hinders the realization of untapped creative potential and restricts to flow of innovation ideas.

Cr8ive aims to address these issues by providing a dedicated platform where individuals can freely express their self by showcasing their creativity, collaboration with peers and businesses, and gain the recognition they deserve. Through the platform, users can connect, inspire, and create together, ultimately filling the void that currently exists for both individuals and companies seeking for creative solutions.

## Goal of the project

*Advantages of this project:*

***Empowering Creativity****: By providing a dedicated space for creative expression, the project empowers individuals to unleash their creativity and gain the recognition they deserve.*

***Collaboration****: The project seeks to encourage collaboration among users, allowing them to combine their creative energies and produce exceptional works and additionally, it aims to bridge the gap between companies and creative individuals, creating valuable partnerships and collaborations.*

***Networking and Exposure****: Users can expand their network, gain exposure, and potentially find job opportunities or partnerships through their engagement on the platform.*

***Inspiration and innovation:*** *The project creates an environment where creative minds can inspire each other, resulting in a continuous cycle of innovation and artistic growth.*

***Value to Companies****: Companies benefit by gaining access to a pool of talented individuals and creative ideas. If companies search for more creativity this is the place to search for. Cr8ive allowing companies to identify and recruit individuals with the skills and creative mindset needed for specific projects or job positions.*

***ICT Product Possibilities:***

*The ICT product offers various possibilities that the project will realize, including:*

*Content sharing: Users can easily share their work, ideas, and projects with community and businesses.*

*Networking features: Robust networking features will facilitate connections among users and businesses.*

*Privacy and security: Ensuring the safety and security of user data and content.*

*Scalability: The product will be designed for scalability and extendibility to accommodate a growing user base and increased content.*

## Scope and preconditions

|  |  |
| --- | --- |
| **Inside scope:** | **Outside scope:** |
| 1. Development of the online platform | 1. Advanced AI features |
| 1. Content moderation | 1. Hardware Development |
| 1. User Analytics | 1. Content Creation |
| 1. Integration of Core Features | 1. Advertisement by User Analytics |
| 1. Real-time Chat Feature |  |

*Preconditions:*

***Technology Stack:*** *Fontys Hogeschool teachers suggested to use a technology stack that includes:*

* *Programming Language: Java*
* *Back-End Framework:**Spring Boot*
* *Build Tool: Gradle*
* *Database: MySQL*
* *Front-End Library: React*
* *Additional Framework (for java): Lombok*

The project will build upon these technology choices.

## Strategy

*Cr8ive will follow an Agile approach, specifically employing the Scrum framework. Agile methodology is chosen due to its efficiently, flexibility, and collaborative nature. Although this is a one person project, it aligns well with the project’s goals and requirements.*

Reasons for choosing Agile:

**Flexibility and adaptability**: Agile allows for frequent reassessment and adaptation of project goals, priorities, and features. This flexibility is crucial for a project that involves creative aspects and evolving user needs.

**Development**: Agile breaks the project in smaller, manageable parts(sprints), allowing for incremental development and continuous improvement. This approach aligns well with the creative process.

## A diagram of a company Description automatically generatedEnd products

**Project plan**

* A detailed document outlining the project’s scope, objectives, timelines, recourses allocation, and risk management strategies. It serves as a roadmap for project execution.

**User stories**

* A backlog where tasks will be separated into smaller pieces. By separating them the project will be better manageable and I create a better overview on what needs to be done, what is in process and what is finished.

**Test Plan and Test Cases**

* A test plan outlining the testing strategy and methodologies. Test cases specify scenarios and expected outcomes for quality assurance.

**Software Application**

* The core product of project, including all features and functionalities specified in the requirements. This is the platform where users can showcase their creativ6ity and collaborate.

**User Authentication & Registration System**

* A system for user authentication and registration is crucial for securing user accounts.

**Content Discovery and Search**

* A content discovery system, including a “For You” page or recommendation based on user preferences and hashtags, helps users discover new content.

**User Profile pages**

* User profile pages, also comparable to portfolios, where individuals can showcase their work, provide a brief bio, express their self and link to their more detailed page.

**Content Upload and Sharing**

* The ability for users to upload and share their creative content, including images, videos and text.

**Social Interaction Features**

* Features like following other users, liking, commenting, and sharing their content are essential for building a vibrant community.

**Messaging and Collaboration**

* Features for private messaging and collaboration among users can foster creative partnerships.

# Project organisation

## Stakeholders and team members

*For the incoming 18-week individual project, I have two key stakeholders who play two important roles in grading and providing valuable feedback throughout the project duration.*

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Abbreviation** | **Role and functions** | **Availability** |
| *Jarno Dijkmans* | *J.D.* | *Student, Project Leader*  *Is responsible for creating the individual project.* | *Monday, Wednesday and Friday at school.*  *Tuesday, Thursday, Saturday by call.* |
| *Bart Rabeling* | *B.T.* | *Teacher*  *Is responsible for assessing my progress, providing constructive feedback, and assigning grades based on my work.* | *Monday and/or Wednesday est. 20 min a day.* |
| *Erik van der Schriek* | *H.J.D.* | *Teacher*  *Is responsible for assessing my progress, providing constructive feedback, and assigning grades based on my work.* | *Wednesday and Friday est. 20 min a day.* |

## Communication

During my individual project, effective communication with all stakeholders is essential. To facilitate this, I have established the following communication channels and guidelines:

1. Location and Availability:
   * On-site presence: I will be physically present at fontys Hogeschool Eindhoven on Mondays, Wednesdays, Fridays.
   * Online availability: On days when I am not on-site, you can contact me via email at [513745@fontys.student.nl](mailto:513745@fontys.student.nl), call 0612137055 or send a message on Microsoft Teams to [513745@fontys.student.nl](mailto:513745@fontys.student.nl).
2. Immediate Issue Resolution:
   * In case of urgent issues or questions, I will make every effort to contact the teachers promptly.
   * If teachers are not available on-site, I will reach out to them via email for a quick response.
3. Regular Progress Meetings:
   * Every three weeks, There will be a sprint meeting with my teachers to review and discuss my current project progress.
   * These meetings are crucial for receiving feedback, addressing any concerns, and ensuring alignment with project objectives.
4. Communication Goals:
   * The primary goal of communication is to maintain transparency and ensure that all stakeholders are well-informed about project progress.
   * Effective communication also serves as a platform for seeking guidance, resolving challenges, and receiving timely feedback.
5. Communication Location (On-site or Online):
   * On-site meetings will take place at Fontys Hogeschool Eindhoven on specified days.
   * Online communication, including email and Microsoft Teams, will be used on days when I am not on-site.
6. Timing and Frequency:
   * On-site meetings: Mondays, Wednesdays, And Fridays during my presence at the institution.
   * Online communication: Available throughout the week for non-argent inquiries.
   * Sprint meetings: Every three weeks, as scheduled.
7. Attendees List for sprint meetings:
   * Teachers (Bart Rabeling and Erik van der schriek)

# Activities and time plan

## Phases of the project

*Introduction and Problem analysis.*

*This phase marks the project beginning, what the project goals are, the scope, and problem statement are defined and analyzed in-depth.*

* *Defining project idea, goals, requirements and objectives.*
* *Identifying stakeholders and their expectations.*
* *Problem analysis*
* *Developing a project plan.*

*Planning and Documentation:*

*In this phase, detailed planning and documentation to give an idea how long the project will take and what the project will look like.*

* *Creating a project schedule and timeline.*
* *Defining project deliverables.*
* *Establishing communication and collaboration protocols.*

*Execution, oversight and Development:*

*This phase involves the actual implementation of the project plan and the development of project deliverables, during this keep continuous oversight to ensure that the project stays on track.*

* *Carrying out tasks, and assignments*
* *Regularly updating project documentation.*
* *Iterative development cycles (Scrum)*

*Evaluating and Reflection:*

*At this stage, the project’s outcomes and processes are evaluated and reflected upon for improvement.*

* *Reviewing project achievements against initial goals.*
* *Gathering feedback from stakeholders.*
* *Identifying lessons learned and areas for improvement.*
* *Conducting retrospectives (scrum)*
* *Managing scope changes if necessary.*

*Conclusion and Wrap-Up:*

*This final phase marks the formal conclusion of the project and the handover of deliverables to relevant parties.*

* *Finalizing project documentation and reports.*
* *Conducting project presentations.*
* *Handing over project assets to stakeholders..*

## Time plan and milestones

*Agile Framework: Scrum*

***Sprint lengths:*** *3 a 4 weeks*

|  |  |  |
| --- | --- | --- |
| **Phasing** | **Effort** | **Date** |
| 1 | *Ideation* |  |
| 2 | *Project plan* |  |
| 3 | User Stories |  |
| 4 | backend layout |  |
| **Sprint delivery 1** | **N/A** | **Sept. 22** |
| 5 | Database Connection |  |
| 6 | Implement User Stories |  |
| **Sprint Delivery 2** | **N/A** | **Oct. 13** |
| 7 | Frontend layout |  |
| 9 | Implement User Stories |  |
| 10 | Update Documentation |  |
| **Sprint Delivery 3** | **N/A** | **Nov. 10** |
| 11 | Implement User Stories |  |
| **Sprint Delivery 4** | **N/A** | **Dec. 1** |
| 12 | Improve functionalities |  |
| 13 | Implement User Stories |  |
| **Sprint Delivery 5** | **N/A** | **Dec. 22** |
| 14 | Wrap up |  |
| 15 | Prepare Presentation |  |
| **Sprint Delivery 6 (Final)** | ***N/A*** | **Jan. 19** |

# Testing strategy and configuration management

## 

## Testing strategy

*Unit testing (backend)*

***Objective:*** *Ensuring that individual components and functions in the backend work as expected. By creating true statements but also false statements to make more clarity.*

***Automation:*** *Unit tests are typically automated and run frequently during development.*

***Tools:*** *Junit for java-based unit testing.*

*Integration Testing(Backend and Frontend)*

***Objective:*** *Test the interactions between different layers, including the integration of the backend with the frontend.*

***Automation:*** *Automated tests can be created by using Spring Boot tools.*

***Tools:*** *Spring Boot provides tools for integration testing the backend, for this project I will try to use Cypress.*

*System Testing (End-to-End)*

***Objective:*** *Validate the entire system’s functionality.*

***Automation:*** *For so far I know currently, Cypress is automatic.*

***Tools:*** *Cypress for end-to-end testing.*

## Test environment and required resources

*<< Describe the test environment. E.g., do you envision a DTAP (Development, Testing, Acceptance, Production) environment. Can you make use of a CI/CD environment or will you develop your own?*

*It often helps to use a picture to visualize the test environment.*

*If you already know, describe which resources are required for realization and testing. Think of hardware, cloud environments and specific tooling required for development and testing.*

*>>*

## Configuration management

*In this project, I will utilize GitLab as my configuration management tool. GitLab offers several advantages, including robust version control and the ability to prevent data loss through branch management.*

*Throughout the project, I will use a branching strategy, working on new features or changes in dedicated side branches. The main branch will serve as the stable base, where I will push all completed work.*

A diagram of a branch

Description automatically generated

# Finances and risk

## Project budget

*In this project, there is a non-existing budget. The project is undertaken for the purpose of achieving learning outcomes, and no external financial resources are required.*

## Risk and mitigation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Risk** | **Impact** | **Probability** | **Prevention activities** | **Mitigation activities** |
| 1. Technical Challenges | 8 | 7 | Extra research before starting development. | If I encounter technical difficulties, making room for extra time to troubleshoot and seek for assistance from teachers. |
| 1. Change in Project scope | 7 | 6 | Clearly define the project scope and objectives at the beginning. Frequently communicate with project stakeholders to ensure alignment. | If the scope changes, discuss modifications with teachers to ensure the project remains on track and meets learning outcomes. |
| 1. Teacher Unavailability | 6 | 9 | Maintain regular communication with teachers regarding project progress. | In case of teacher unavailability, reach out for other assistance by colleagues etc. |
| 1. Personal health issues | 7 | 2 | Maintain a healthy work-life balance. | If I fall ill, inform my teachers promptly and discuss potential adjustments to project deadlines. |
| 1. Data loss | 10 | 2 | Implement regular data backups (git lab). To prevent data loss. | In case of data loss, restore form backups to minimize damage. |