PROJECT PLAN

Zoo Bazaar - Jupiter

Contents

Current situation

Zoo situation

Logo: None

Map: None

Street: Bird Street 25

Opening times: 9:00 to 18:00

Administration technology: Paper, Excel

Automation level: None

Synopsis

As the zoo has recently been established, things like a logo or map of the zoo aren't available yet. ASTA Solutions has a design branch that has offered to extend their contract by taking up those tasks and providing them to the zoo.

The Zoo already exists but is in an early phase where animal care is prioritized as the zoo cannot accommodate visitors via online sources yet. Because of this it is possible to visit the zoo, but all of this is done on location, like ticket sales.

The administration of the zoo is very old school. All of it is done on paper which results in a lot of manual labor and no clear overview. An employee gets their schedule on location on paper, employee scheduling is also done on paper. Animal and employee info is also kept on paper as well as the tasks surrounding animal care. As you can see it's a very outdated system and is very prone to error, wasting time and information loss.

Project definition

In this chapter we will talk about the project background, problem definition and goal we have established.

Project background

Zoo Bazaar is opening their first zoo in Eindhoven. Funded by the parent company "Jupiter", they intend to start as well-prepared as possible. The biggest challenge that Zoo Bazaar's management foresees is keeping track of their employees and animals.

The client envisions a system that could manage various aspects of their zoo. In the current state, many of these aspects are very time-consuming and inefficient as they are mostly being done on paper, which requires a lot of double-checking information and is prone to errors.

The aspects which our system will improve include but are not limited to:

- Managing animals' welfare
    - Feeding timetable
    - When to move animals outside
    - Yearly health checkup
- Managing employees
    - Scheduling
    - Attendance
- Front-office tasks
    - Ticket sales
    - Customer service
    - Performance statistics
- Overview of employee
- Overview of animals
- Different systems for different employees

Problem definition

Zoo Bazar wants to start the operation of their newly established zoo as best as possible. To do this they have identified problems points that they assume can be solved by software solutions. What they want us, ASTA Solutions, to focus on first is to accommodate the animals and employees at the zoo. For the animals they would like a software solution to automate the workflow of animal care, which would consist of concise information displayed in a filtered overview and scheduling for feeding and general care. For the employees, a software solution is required for the appointment of tasks and work scheduling around the zoo, which once again ties into the automation of animal care.

Project goal

Our project will help the management of the zoo. By making it easier for employees to see their tasks/assignments and automatically assigning them. Showing a clear and understandable overview of all animals held in the zoo, as well as showing individual animals with their specific needs. And a comprehensive overview of sales overtime and customer feedback.

Expected results and scope

Now that we know the requirements for the software solution from the Zoo Bazaar, we can start listing the deliverables we will develop.

The deliverables will be split up into a windows forms application and web application, as these will handle and be used for different operations.

Windows Form:

  -Admin form – can add new employees and managers

  -Planner – Assigns employees to tasks

  -Manager - Manages employee and animal data

Web application:

-Basic website

-Login system for employees

-profiles for employees (changing data too)

-Animal aggregation

-Animal profiles

Minimum viable product

What products are you going to deliver?

For the documentation part of the project, we will be delivering a project plan, Reports of the meeting with the client and a prototype of the user interface of the project.

For the final product we will deliver a web application with the following requirements:

- Users should be able to login.
- The application should display different information for different employees.
- Planners should be able to see the information they need to.
- Planners should be able to make feeding timetables for different animals.
- Planners should be able to make timetables to move the animals outside.
- Administration should be able to add, remove and edit animals.
- Caretakers should be able to see which task they need to do.
- The application should be able to divide tasks between the employees.
- The manager should be able to see an overview of employees.
- The manager should be able to see an overview of the animals.

Project structure

This is how we will structure our team and how work will be divided. Important to note is that nothing is absolute.

Client

Name: Michiel Koehorst
Company: Zoo Bazaar – Jupiter
Position: Manager
E-mail: m.koehorst@fontys.nl

Project team

Team Name: ASTA Solutions
Members: Tonio Stocks, Aaron Eljas, Andy Pan, Slobodan Starcevic,
Representative: Slobodan Starcevic
Senior Supervisor: Qin Zhao, q.zhao@fontys.nl
E-mails: t.stocks@student.fontys.nl, a.eljas@student.fontys.nl, a.pan@student.fontys.nl,
s.starcevic@student.fontys.nl

Team expectations

- Hold responsibility for their task
- Be reasonable
- Be communicative with the other team members
- Be open to feedback
- Be responsive
- Hold accountability for your actions
- Hold responsibility for not following any of the above
- Being aware of that the teacher will be asked to intervene if unreasonable actions persist

Roles

As the project is an ever-changing environment, we expect to find out that workloads will differ from expectations. We will assign tasks loosely but when needed can be refined into a more precise division to accommodate for a fair working environment between team members.

-Aaron – Scheduling and planner-management

-Slobodan – Front-End

-Tonio – Animals

-Andy – Employees

Constraints

Here we will talk about the constraint which the project is under.

We are limited to the programming languages we will use to solve the project. The resources we will use to make the project are as follows;

- .NET Core
- Razor pages
- Windows forms
- C#

Besides resources we also have time constraint for the following deliverables;

- 10/2/2023 project plan
- 17/02/2023 user requirements specification
- 10/03/2023 test plan and binaries to peers
- 17/03/2023 Software

Risk assessment

These are the risks we have found as a group.

1. **Group member(s) absent or sick**, work on the project will be set back, due to the group being small. Meaning the rest of the group members must pick up the work of the absent group member, which could lead to not meeting deadlines due to the additional work put on the other members of the team.
2. **Tasks not finished on time can be harmful for the project's completion.** Tasks can stack up and delay the completion of following tasks further.
3. **Data loss**, documents and files can be lost due to team members' computers breaking etc., setting the group back on progress
4. **Group member(s) delayed attendance**, it can be harmful for the completion of tasks on time, as other group members might have to pick up the missing persons' workload if a deadline is nearby.
5. **Equipment failure**, when a group members' equipment for example a laptop breaks, development / progress will be delayed due to the group member not being able to work on their tasks

6. **What if we cannot work at school together?** It could be that the school locks down or the facilities are not accessible, what do we do in that case?

7. **What if someone stops studying?** It can always happen that a student stops the study and then you are left with more work in your group, what do we do then?

8. **What if someone does not or cannot attend a meeting?** Life can be in the way, or for that matter laziness, so how do we handle someone not turning up to a meeting where decisions need to be made?

9. **Not understanding a task and getting to a stalemate**, this is always possible as we are still learning, but how do we deal with a member not being able to progress?

(On the next page you can find the risk assessment table)

Risk	probability	impact	Mitigation
1	medium	medium	The project team will keep each other informed about their presence and work remotely if needed. Each member is responsible for reporting absence or sickness so changes can be made to the task.
2	low	medium	The team will regularly check in and see how each task has been progressed and mitigate resources if necessary to complete tasks on time. This will be done through meetings.
3	high	high	Documents and files will be hosted in a shared environment and not saved locally
4	medium	low	Project members keep each other informed about delays so the members who are present can decide how to efficiently divide the workload for the time being.
5	low	high	Since all files are uploaded in shared folders, the member can rent the equipment necessary from the school.
6	low	high	If we cannot work together physically, we will start working remotely from discord or Teams. From there we can share our screen and be on calls to finish work.
7	low	high	The moment it happens, communicate it to the teacher. The project still needs to be finished so the left work will be divided between the residual members.
8	medium	medium	If someone knows they will not be able to attend a meeting, they are required to communicate this. If someone does not turn up without a reason, the decisions that must be made will be made by the other members. Furthermore, this will be reported to the teacher supervising the meeting and written down for future reference.
9	medium	high	If a team member does not know how to go on with their task, first they will communicate this with the group and see if someone does know the solution. Even if the problem is not solved, we will take it to one of the teachers.

Deliverables

The following products represent the software solution and are considered the Deliverables. The brackets show in what week the said deliverable is expected to be done(deadline).

- Admin windows app (Week 3)

- Web app (Week 3)

- Login system on web app for employees (Week 4)

- Employee profile (Week 4/5)

- Employee schedule (Week 4)

- Animal register (Week 4)

- Animal profile (Week 4/5)

- Notes about animals (sent by employees through web app) (Week 5)

- Company email (for employees too) (Week 3)

- Map of zoo (Week 3)

- Logo of zoo (Week 2)

- JavaScript front end (Week 5)

ON THE NEXT PAGE IS THE MOSCOW PRIORITISATION FOR THE DELIVERABLES

Non-deliverables

The following products are not part of the software deliverables, but nonetheless are an important part of the project and are required documents.

-Project plan (Week 2)

-Class diagram (Week 3)

-Product Breakdown Structure (Week 3)

-User Requirement Specification (Week 2)

-User Manual (Week 5)

MOSCOW prioritization

Must have	Should have	Would like to have	WILL NOT HAVE (for now(6weeks))
Admin windows app	Notes about animals (sent by employees through web app)	Map of zoo	Ticket system
Web app	Company email (for employees too)	Logo of zoo	Accommodate for disabilities (put on web app as info but also integrate into ticket system)
Login system on web app for employees		JavaScript front end	Customer service
Employee profile			Performance statistics
Employee schedule			Live stream
Animal register			System that allows to keep track of employee attendance.
Animal profile			

Planning

Week 1:

- Create a name and logo for our group

- Interview client

- Create and hand in project plan

Week 2:

- Improve project plan based on feedback

- Create URS (User Requirements specification)

Week 3:

- Improve URS based on feedback

- Implement software solution

Week 4:

- Implement software solution

Week 5:

- Implement software solution

- Create test plan (workshop)

- Send test plan and binaries to peers

- Review peers and create test report (fill received test plan in).

Week 6:

- Tag software as deliverable in GIT repository

- Present definitive version to client and peers

Phasing

1. **Analysis**

In this phase we will brainstorm, research, and discuss what we are going to develop. We will also make the project plan, USR, and have an interview with the client. This is where we will concisely decide on what we exactly want to make.

2. **Design**

After all the brainstorming and having all options laid down on the table, we will choose one which we will continue to refine and prototype. In this phase we will start designing a protype for the user interface for the application and make the class diagram for the back end of the project.

3. **Implementation**

Once we have refined our design it is time to implement it. In this we will start with writing the code and making the user interface.

4. **Testing**

When we are done implementing the code, we will run some final tests. We will try to debug and refine our code so that the client will have no issues once using it.

5. **Deployment**

In this phase we will deliver the deliverables and we will present the result to the client.

Team charter ASTA

When do we sit down as a group?
At school: during breaks and PRJ time
Outside school: whenever necessary on teams, but the main chunk of communication will be done at school.

What behavior do we expect from all team members?
Everyone is expected to be reasonable and respectful towards each other.

Is confidentiality needed?
Only to a certain extent. You are not allowed to share the project documents with others to let them copy it etc. Besides that, if it is not explicitly said that the info is confidential, it can be shared.

How do we make decisions?
During meetings we can casually talk to each other and make decisions. Through reasonable communication we should be able to come to a solution.

How will participation be tracked and ensured?
Communicating through the WhatsApp group when someone does not or cannot participate.

Do we appoint someone as a leader?
We have appointed Slobodan as the group representative.

Do we make agendas for meetings?
We will have a formal meeting once a week where we could make an agenda if needed but it should not be forced if redundant.

How do we give each other feedback?
As we will sit with each other during the PRJ and break time, we can talk when feedback is needed. Communication is expected to be informal, and feedback can be given whenever.

How will roles be divided?
Once the project is clear, we will agree on who does what. Everyone will voice what they are interested in doing.

How do we handle this formal once a week meeting?
Every Friday we will have a more formal meeting where we will go in depth about what everyone has done, how far everyone is in their assignment, and this will also serve as a feedback moment for each other that we will write down for documentation. This meeting also serves as a moment for adjustment where we can tell each other if we need more time for x assignment etc.

How do we share our work?
We will make a OneDrive folder where documents like word docs will be shared, while the project itself, like the coding part, will be shared over GitLab.