Project Plan

Team Gen ChimpanZ's
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Overview

This project plan document will detail the general work schedule of Gen ChimpanZ and their development on Nuclei. The Sprint Plan section provides a more detailed look at the work items worked on and hours allocated for each sprint cycle leading up to a particular milestone. This information is subject to change depending on the circumstances our team will encounter in the future. The Risks section will describe these circumstances in further detail.

Risks

With the development of Nuclei there are risks that we need to be aware of and address. Since Nuclei contains a document system we could run into some legal issues regarding the security of these documents and . We also have to be aware of the risk that a team member is unable to do work for whatever reason (sick, dropped) which could make us fall behind our plan. Another risk that can occur and we should expect is that completing a certain task will take more time than expected and could make us fall behind in our sprint plan. This can happen for a variety of reasons including inexperience with developer tools, bugs, errors in our architecture,or misjudging the difficulty or time it takes for a task.

Sprint Plan

Business Item	Status	Assigned To	Start Date	End Date	Effort (Hours)	Comments
Project Proposal (09/20/22)						
Milestone 1 (10/05/22)						
Sprint 1 Starts (10/05/22 - 11/09/22)					200	Duration: 35 days
Low Level Design	Not Started		10/06	11/09	80	
Format and Content	Not Started		10/06	10/13	50	
Revisions	Not Started		10/13	11/09	30	
Network Design	Not Started		10/14	11/09	80	
Format and Content	Not Started		10/14	10/20	50	
Revisions	Not Started		10/20	11/09	30	
Registration	Not Started		10/20	10/26	24	
Create Account	Not Started		10/20	10/23	16	
Delete Account	Not Started		10/23	10/26	8	
Logging	Not Started		11/02	11/09	16	
Implement	Not Started		11/02	11/09	16	
Sprint 1 End (11/09/22)						

Milestone 2 (11/09/22)						
Retrospective 1						
Sprint 2 Starts (11/09/22 - 12/12/22)					190	Duration: 33 days
Authentication	Not Started		11/09	11/16	40	
Login	Not Started		11/09	11/12	20	
Logout	Not Started		11/13	11/16	20	
Authorization	Not Started		11/17	11/24	40	
Creating Profile Types	Not Started		11/17	11/19	20	
Create Admin	Not Started		11/19	11/22	10	
Define Permissions	Not Started		11/22	11/24	10	
Account Recovery	Not Started		11/25	12/02	32	
Change Password	Not Started		11/25	11/27	10	
Forgot Password	Not Started		11/27	11/29	12	
Delete Account	Not Started		11/29	12/02	10	
Bill of Materials	Not Started		12/03	12/12	80	
Format and Content	Not Started		12/03	12/06	50	
Revisions	Not Started		12/06	12/12	30	
Sprint 2 End (12/12/22)						

Milestone 3 (12/12/22)						
Retrospective 2						
Sprint 3 Starts (01/19/22 - 01/31/22) gap in between sprints due to winter break					70	Duration: 12 days
Flesh out backend API with .NET services, architecture, patterns	Not Started		1/19	1/20	8	
Database	Not Started		1/20	1/23	18	
Design relational model	Not Started		1/20	1/21	10	
Implement relational model	Not Started		1/21	1/23	8	
Dashboard System	Not Started		1/23	1/31	44	
Delete Profile	Not Started		1/23	1/25	8	
Edit Profile	Not Started		1/25	1/27	8	
View List of Trainers	Not Started		1/27	1/28	8	
View List of Training Camps	Not Started		1/27	1/28	8	
Create Training Camp	Not Started		1/28	1/31	12	
Sprint 3 End (01/31/22)						
Sprint 4 Starts (02/01/22 - 02/15/22)					80	Duration: 14 days

Dashboard System	Not Started		2/1	2/9	44	
Search for User	Not Started		2/1	2/3	12	
Add Trainer to List	Not Started		2/3	2/4	8	-Requires Search User
Switch Profile	Not Started		2/4	2/7	16	
Personal Calendar	Not Started		2/7	2/8	8	
Class System	Not Started		2/9	2/15	26	
Create Class	Not Started		2/9	2/12	16	
Delete Class	Not Started		2/12	2/12	4	
View Class	Not Started		2/12	2/13	4	
Invite to Classroom	Not Started		2/13	2/15	12	-Requires Create Class
Sprint 4 End (02/15/22)						
Retrospective 3						
Sprint 5 Starts (02/16/22 - 02/28/22)				70	Duration: 12 days	
Class System	Not Started		2/16	2/24	44	
Manage Class Settings	Not Started		2/16	2/18	12	-Requires Invite to Classroom
View Class List	Not Started		2/19	2/20	8	
Leave Classroom	Not Started		2/20	2/21	6	
Schedule Training	Not Started		2/21	2/24	18	

Dashboard System	Not Started		2/24	2/28	26	
Training Camp Settings	Not Started		2/24	2/28	26	-Requires Search User -Requires Class System
Sprint 5 End (02/28/22)						
Retrospective 4						
Milestone 4 (02/28/22)						
Sprint 6 Starts (03/02/22 - 03/14/22)					70	Duration: 12 days
Document System	Not Started		3/2	3/14	70	
Access Document System	Not Started		3/2	3/3	8	
Upload Document	Not Started		3/3	3/7	24	
Remove Document	Not Started		3/7	3/8	5	
View Document	Not Started		3/7	3/8	5	
Document Visibility	Not Started		3/8	3/10	12	
Private Document Authorization	Not Started		3/11	3/14	16	-Requires Document Visibility -Requires Search User
Retrospective 5						
Sprint 7 Starts (03/15/22 - 03/21/22)					30	Duration: 6 days
Dual Feedback System	Not Started		3/15	3/18	30	
Leave Review for User	Not Started		3/18	3/20	20	

View Reviews	Not Started		3/20	3/21	10	
Sprint 7 End (03/21/22)						
Retrospective 6						
Milestone 5 (03/22/22)						
Sprint 8 Starts (04/03/22 - 04/11/22) gap between sprints due to spring break					45	Duration:8 days
Direct Messaging System	Not Started		4/3	4/8	30	
Access Profile	Not Started		4/3	4/5	8	
Access through Dashboard	Not Started		4/3	4/5	8	
Message Exchange	Not Started		4/5	4/8	14	
Class System	Not Started		4/8	4/11	15	
Post Message to Class	Not Started		4/8	4/11	15	
Sprint 9 Starts (04/12/22 - 04/25/22)					70	Duration: 13 days
Notification System	Not Started		4/12	4/18	30	
Send Notification	Not Started		4/12	4/16	22	
Manage Notification Settings	Not Started		4/16	4/18	8	
UI / UX	Not Started		4/12	4/25	40	
Revise UI created in	Not Started		4/12	4/23	20	--To ensure all of our built features

previous work items						are cohesively connected on the front end
Optimize UX	Not Started		4/23	4/25	20	
Sprint 9 End (04/25/22)						
Retrospective 7						
Milestone 6 (04/25/22)						
Sprint 10 Starts (04/26/22 - 05/08/22)					70	Duration: 12 days
Testing	Not Started		4/26	5/05	50	
Tests to find any leftover exploits and bugs	Not Started		4/26	5/02	32	
Fix any if found	Not Started		5/02	5/05	18	
Analytics	Not Started		5/05	5/06	15	
Build analytics	Not Started		5/05	5/06	15	-Requires Logging
Deploy	Not Started		5/07	5/08	5	
Troubleshooting	Not Started		5/07	5/08	4	
Release product to users	Not Started	All Members	05/08	05/08	1	We made it!
Sprint 10 End (05/08/22)						
Milestone 7 (05/08/22)						

Time Allocation

Milestone 3

Authentication: We estimate that constructing the authentication (being able to login and logout, and access to each API endpoint) will take 20 hours. This is because our team needs to research and set up the login and logout functionality, generate a key per request, research cryptographic implementation, and establish a place for it to be stored. If every team member is able to work on Authentication for 2-3 hours this should be completed.

Authorization: Authorization consists of creating profile types, creating admin level, and defining permissions. We believe that the initial creation of profile types will take us 20 hours as the content of each profile varies drastically. Defining permissions and creating an admin role should take 10 hours each as they are common built in features for authorization. In total Authorization should take us 40 hours.

Account Recovery: Account recovery is something that every system that deals with accounts needs. Since it is so common and has been previously laid out we believe that it will take us 32 hours in total. 10 hours will be allocated towards giving users the ability to change passwords. Since all this requires is having the user verify their password, entering a new password, and verifying that the new password is valid we believe that 10 hours should be sufficient time to accomplish those tasks. We plan on spending 12 hours on the forgotten password functionality. It is more or less the same thing as changing password but requires the user to verify their email first. Finally 10 hours should be more than enough to delete an account which will need to handle some conditions but will solely delete the account from our database.

Bill of Materials: The Bill of Materials is the document that lays out everything we need to deliver an end product. In order to construct this document we will require to do a lot of research into the tools we are using and how they work together. We will also be delivering several different sections so we believe that the entire Bill of Materials document will take us 80 hours to complete. 50 hours will be allocated to coming up with the content and having the right format. Finally 30 hours will be used to revise multiple times to ensure quality. We believe this document will take 80 hours from our research and looking at the length and complexity of other examples of the document.

Milestone 4

Backend Structure: Some time is required to boot up a working environment (an IDE or code editor) for each machine. The .NET project itself is created as well as folder directories to organize the architecture of the project. The majority of time will be spent cloning the project's GIT repository to each machine, troubleshooting discrepancies with each machines' environments, and deploying the runtime so it is testable.

Database: Database is expected to take about 70 hours. We will have to design a blueprint for an optimized and normalized database, which we consider the utmost importance in the third sprint as it has to do with every data coming on the Nuclei. Designing the tables and making the connections between different tables will be a very serious issue due to having to work with other features, such as working with accounts and profiles, making logs, and managing classes. We will need to have multiple talks as a team and make a number of designs for the database, and the total hours to create the design is expected to be around 10 hours. After the design, making the whole database in the computer is expected to take 8 hours due to our lack of experience with MySQL despite the blueprint made. This may require extra hours depending on future features.

Dashboard: Dashboard is expected to take about 114 hours through consecutive sprints and milestones. This feature is the one of the biggest features with many parts in it, including, but not limited to, profile, multiple lists, and searching users. This is one of our core features as Nuclei as it connects different users together in one area. Editing and deleting profiles is a requirement as the user's information can always be changed or requested to be removed for the user's reasoning, and it will have to work with the database, so we expect it to take 8 hours each. Viewing the list of the trainers and list of the training camps is the start on the connection between the users, and getting said lists is expected to take 8 hours each also. On milestone 4, searching users is likely a more difficult issue as it is very specific on the search based on relevance of the name or other information, so we have put it down for 12 hours. Switching profiles has many impacts on what the user can see and do as each profile has different classes, notifications, etc, and making sure there are no breaking issues may be a difficult problem. Therefore, we expect this part to take 16 hours. Adding trainer to the list requires the search for the user part to be finished, so it may have extra time pushed over depending on the development speed of search for the user. Otherwise, we expect it to take 8 hours as an average work. Personal calendar is assumed to be a fairly doable part, so we put it at 8 hours as an average work. Lastly, training camp settings may likely be a difficult issue due to having to work with other features: classes. Having to work with both sides of the features may become a difficult issue, so we considered it to take 26 hours of milestone 5.

Class System: In milestone 3 we plan on starting the class system. We plan on doing the create class, delete class, view class, and invite to class. In total this will take us 36 hours to complete. We believe that creating a class will take the longest as it requires the most logic in order to be functional so we will allocate 16 torwareds it. Once we are able to create a class deleting and viewing it should be simple so we will only allocate 4 to each. Finally Inviting someone to the class is a bit more complex as it requires our search function and an additional function of selection to work so we will allocate 12 hours towards it.

In our next sprint in the same Milestone we plan on finishing the class system including the manage class settings, view class list, leave classroom, and schedule training.

References

1. https://cutewallpaper.org/24/sports-png/view-page-24.html
2. https://parkavenue.dmschools.org/wp-content/uploads/sites/26/2013/12/winter_break.jpg
3. https://infograph.venngage.com/edit/de1f94ef-3bb1-405a-8336-acb944a3c268

Version Changelog

Version	Submission Date	Changelog
1	10/03/22	Initial Version
2	10/5/22	Change Draft Created Overview and Risks Section Created Sprint Plan ● Split into 7 milestones ● Split into 10 sprints ● Assigned dates and hours towards each task Created Time Allocations Created references section