CONESTOGA

Connect Life and Learning

Group Project- Part 2

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Course	Project Management
Section	10
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Contents

Q1. List types of decisions that will need to be made and suggest which ones should be made by the Product Owner, individual Team Member, Team collectively, or Scrum Master and tell why that person or group should make the decision.

- Tree Species Selection: As work involves utilization of various skills and entails approval, better to work as a team.
- Budget Allocation function is assigned to Product Owner for the following reasons as a Product Owner understands the general requirements to resource management to implement the overall plan of a township.
- Planting Schedule: Scrum Master, that delegates tasks to the development team and also makes sure that it completes the assignments on time.
- Volunteer Coordination: Exploitation of a team member: this may be in the form of utilization or recognition of the specialization, as well as the time the team member would like to devote to team activities.
- Educational Events: Work in a group so that you get different opinions since different people will have a different angle in planning.
- Maintenance Plans: Manage lessons according to the level of reservation and the difference in the skills of children in class through team work.
- Product Owner for Partnership Development while preserving the main goals of the system.
- Information updates and signage: an outgoing team player that is focused on communication and design.
- Scope Adjustments: Cohesion that involves the ability to work together with other people especially in different situations.
- By providing information that is precise and constant, the scrum master encourages the improvement of stakeholders' interactions.

Q2. How can the Product Owner, Scrum Master, and Team Members be more effective using the Agile concepts of simplicity, value, feedback, and change on this project?

- Simplicity: Concentrate on those activities that can make significant difference to the existing processes in order that there will be no over-organization.
- Value: Others are such as planting of conspicuous native flora that will enhance the aesthetic value of the arboretum and its potential as a centre of learning.
- Feedback: It is recommended to obtain the stakeholders' feedback on a bimonthly basis, so ensure timely feedback; hold bimonthly reviews.
- Adapt: Appreciation of change by ensuring the plans are revised where requires by the constructive critics and factors that were not foreseen earlier.

- Collaboration: In essence, the Product Owner and the key stakeholders must ensure that they maintain the pressure in their working relationship in an effort to ensure that they maintain proper alignment.
- Transparency: Remain active in the use of modern tools of communication and ensure that clear communication is made as often as possible in a bid to overcome the barriers to communication.
- Incremental Progress: Use goal setting with small milestones and to reward them to ensure that you are focused on the process.
- Adaptive planning: Analyzing this concept, the master plan can be considered as a dynamic document, which can be easily modified taking into consideration the comments of other people.
- Educational Outreach: Innovate by supporting institutions of higher learning which will help in offering educational services to the community.
- Volunteer Engagement: Recall volunteers' abilities in the best manner possible and show gratitude to their work.

Q3- What communication challenges is this virtual, volunteer team experiencing and how do you suggest overcoming them?

Challenges:

- Challenges resulting from the calendar that is fixed by volunteers' availability of time.
- Few people have social interactions because covid19.
- Providing prompt feedback from all members of the team.

Solutions:

- Some measures that need to be observed include virtual meeting tools to foster communication.
- A company should use e-mail and instant messaging to set up frequent meetings and reporting.
- It is advisable to appoint someone in charge of communication for each inclusive large task.

Q4-Create personas for other stakeholders to show what they want from this project and why.

Persona 1: Sarah, Local Teacher: (34 yrs.)

Occupation: Elementary School Teacher

Interests: Environmental education, Fair and social learning

Goals:

- The arboretum is to be used as a resource centre for student lessons.
- Use practical teaching and learning activities dealing with the indigenous plants and the environment.

Why:

- She adds examples from real life to the curriculum that she teaches.
- Educates students in using timely methods on issues that are associated with the environment.
- Persona 2: This position is with the title of John, Township Maintenance Supervisor.

Persona 2: John, Township Maintenance Supervisor: (45 yrs.)

Occupation: Maintenance Supervisor

Interests: Lower costs, little can go wrong, it is not hard to create beautiful landscapes.

Goals:

- To design the arboretum to be easily managed with few inputs so that it does not drain the parish.
- Thus, the major reason for making the changes is to prevent the project from placing extra work pressure on the team.

Why:

- Promotes the project's ability to be sustained within the existing maintenance capabilities.
- Ensures regularity between the benefits accrued from a project and the resources used to pursue the same goals.

Persona 3: Lisa, Local Resident: (28 yrs.)

Occupation: Marketing Professional

Interests: Social amenities, the aesthetics of a neighborhood

Goals:

- The intention was to establish a collection of tree specimens that was the most beautiful and easily accessible for recreation purposes.
- For conducting, participating in, and engaging in community activities and occasions that take place at the arboretum.

Why:

- Furnishes her with a comfortable and relaxing outlook to her house, improving her quality of life.
- Reinforces the client's social contacts and encourages active citizenship.

Persona 4: Mike, Township Trustee: (50 yrs.)

Occupation: Elected Official

Interests: Communal SM, community mobilization

Goals:

- To watch the principle of this institution, expand the area and adopt the status of an arboretum that the township would be proud of.
- For the project to be aligned with the township's vision and objectives of the township.
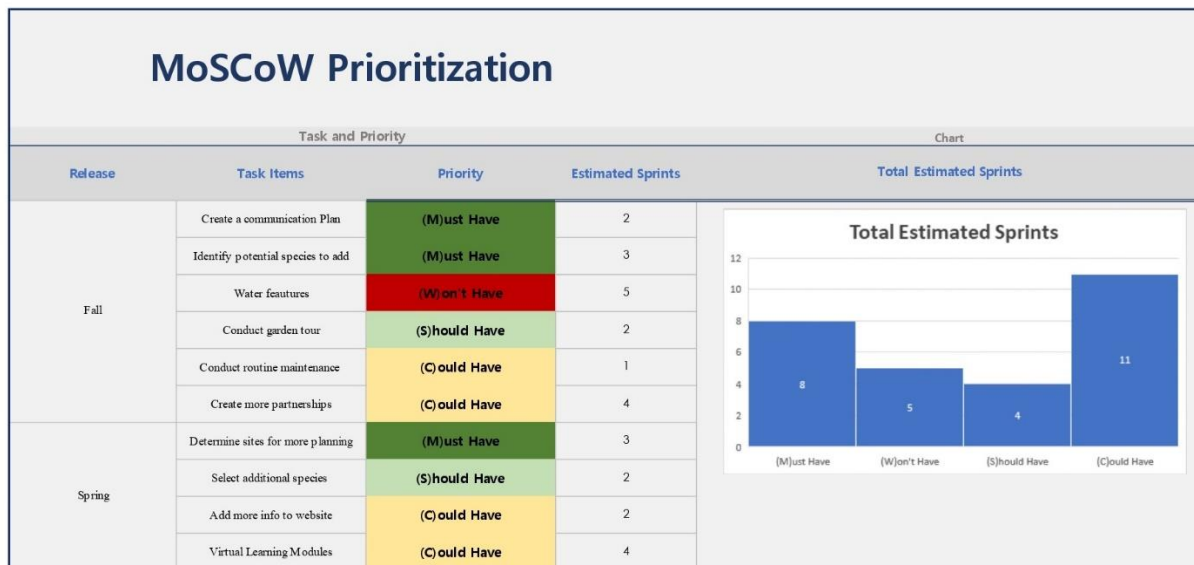
Why:

- It improves living standards and boosts the value of township developments.
- Shows good governance and successful projects within the communities.

Q5: Create a backlog of all of the things you may wish to propose for this arboretum. Include artifacts for all three aspects of scope: physical facility, partnerships, and online presence.

Arboretum Backlog Proposal

PRODUCT BACKLOG REPORT

ID	SCOPE'S ASPECTS	TASK NAME	DESCRIPTION	ARTIFACTS	ASSIGNED TO	PRIORITY	STATUS
1	Physical Facility	Native Plant Collections	Curate and plant a diverse range of native tree and shrub species.	Planting plan, species list, botanical labels	Tree Committee	High	Not Started
2	Physical Facility	Visitor Centre	Build or repurpose a facility for visitor information and educational exhibits.	Architectural plans, budget, exhibit design.	Township Administrator	High	Not Started
3	Physical Facility	Walking Trails	Develop well-marked paths with educational signage and resting spots.	Trail maps, signage design, construction schedule.	Tree Committee	Medium	Not Started
4	Physical Facility	Outdoor Classrooms	Designate and construct spaces for outdoor educational programs.	Site plans, seating designs, educational materials.	Tree Committee	Medium	Not Started
5	Physical Facility	Water Features	Install ponds or water gardens to enhance biodiversity and visitor experience.	Design plans, environmental impact assessments.	Tree Committee	Low	On Hold
6	Physical Facility	Parking and Accessibility Improvements	Expand parking areas and ensure ADA compliance.	Site plans, accessibility audits, permits.	Tree Committee	Medium	Not Started
7	Physical Facility	Greenhouse or Nursery	Build a greenhouse for growing plants and educating visitors on horticulture	Construction plans, equipment list, maintenance schedule.	Tree Committee	Medium	Not Started
8	Physical Facility	Security and Lighting	Install security cameras and adequate lighting along trails and facilities.	Security plan, lighting design, installation schedule.	Public works	Medium	Not Started
9	Partnerships	Local Schools	Partner with schools to provide educational programs and field trips.	Program curricula, field trip guidelines, partnership agreements.	Tree Committee	High	Not Started
10	Partnerships	Environmental Organizations	Collaborate on conservation projects and biodiversity studies.	MOUs, project plans, joint research publications.	Environmental Organizations	High	Not Started
11	Partnerships	Universities and Research Institutions	Establish research programs and internships for students.	Research proposals, internship frameworks, data sharing agreements.	Universities and Research Institutio	Medium	Not Started
12	Partnerships	Corporate Sponsors	Seek funding and support from local businesses and corporations.	Sponsorship proposals, funding agreements, donor recognition plans.	Tree Committee	Medium	Not Started
13	Partnerships	Community Groups	Engage local clubs and societies in volunteering and educational events.	Volunteer schedules, event plans, promotional materials.	Community Groups	Medium	Not Started
14	Partnerships	Government Agencies	Collaborate with local and state agencies for grants and compliance.	Grant applications, regulatory compliance documents.	Government Agencies	Medium	Not Started
15	Partnerships	Artists and Cultural Organizations	Incorporate art installations and cultural events within the arboretum.	Contracts, event plans, installation designs.	Artists and Cultural Organizations	Low	Not Started
16	Online Presence	Interactive Website	Develop a comprehensive website with virtual tours, educational resource	Website wireframes, content management plans, SEO strategies.	Tree Committee	High	Not Started
17	Online Presence	Social Media Campaigns	Use platforms like Facebook, Instagram to engage with the community.	Content calendars, campaign strategies, engagement metrics.	Tree Committee	High	Not Started
18	Online Presence	Virtual Learning Modules	Create online educational content including videos and interactive activit	Video scripts, e-learning platform setup, educational content.	Tree Committee	Medium	Not Started
19	Online Presence	Online Donation Portal	Implement a secure online system for donations and sponsorships.	Payment gateway integration, donation tracking system.	Township Administrator	Medium	Not Started
20	Online Presence	Newsletter and Blog	Publish regular updates, success stories, and educational articles.	Editorial calendar, content creation guidelines, email distribution list.	Tree Committee	Medium	Not Started
21	Online Presence	Mobile App	Develop an app with features like plant identification and interactive maps	App wireframes, user experience design, development plan.	Tree Committee	Low	Not Started
22	Online Presence	Online Volunteer Management	Implement a system for volunteer registration, scheduling, and communica	Volunteer database, scheduling tools, communication templates.	Tree Committee	Medium	On Hold
23	Online Presence	Community Feedback Platform	Create an online portal for community suggestions and feedback.	Feedback form design, moderation guidelines, response plan.	Tree Committee	Low	Not Started
						TOTAL	

Q6: Using two releases per year (fall and spring are both great planting times), suggest the relatively few items you think should be accomplished in each of the next two releases. Use MoSCoW technique to justify how you prioritize.

Tasks essential to the project's structural and developmental phases are prioritized for the Must Haves. Activities that improve the project's community engagement and education components are labelled as Should Haves, meaning they are very valuable but can wait if needed. Could Have tasks are advantageous but less urgent, meaning they can wait without affecting the project's success immediately. Won't Have tasks are completely postponed to free up time for more pressing needs.

Q7: In what order would you suggest completing the in-progress activities? Why?

1. **Assess size and condition of trees**:
   • **Reason:** In order to comprehend the current situation and guide future actions, evaluating the trees' current status is essential and should be done initially.
2. **Remove invasives along woods edge**:
   • **Reason:** Invasive species must be eliminated in order to maintain the health of the current ecosystem and prepare the area for future plants.
3. **Identify new species along woods edge**:

- **Reason:** Finding new species that can flourish in those places after invasive species are eliminated is crucial for maintaining ecological balance and biodiversity.

4. **Transplant 5 species from other site**:
   - **Reason:** After the location is ready and new species are identified, existing species can be transplanted, making sure the transplants have an appropriate environment.

5. **Plant trees along drive**:
   - **Reason:** After the transplants, new tree planting can continue because the road is a distinct, manageable space that can be improved apart from the woods edge operations.

6. **Update site map**:
   - **Reason:** After major modifications like clearing out invasives, moving, and planting trees, the site map should be updated to appropriately depict the current configuration.

7. **Print and post large high-res map**:
   - **Reason:** Lastly, making sure that everyone has access to the most recent information is ensured by printing and publishing the updated map, which facilitates future planning and navigation.

By going in this order, the activities ensure that the development of the arboretum is efficient and well-coordinated, as they build logically upon one another.

Arboretum Project Kanban Board			
To Do	**In Progress**		**Done**
	Planned	**Suggested**	
• Create communication plan Identify potential species to add • Select additional species Determine sites for more planting • Conduct garden tour • Record video tour • Take additional photos • Add more info to the website Remove more invasives Conduct routine maintenance • Create more partnerships Plan and conduct programming • Update master plan	• Remove invasives along woods edge • Transplant 5 species from other sites • Plant trees along drive • Identify new species along woods edge • Assess size and condition of trees Update site map • Print and post large high-res map	• Assess size and condition of trees • Remove invasives along woods edge • Identify new species along woods edge • Transplant 5 species from other sites. • Plant trees along drive. • Update site map • Print and post large high-res map	• 32 original species identified • 22 additional species planted • Deer protection installed. • Signs with QR codes placed • ArbNet certification achieved • High-res site map created Master plan created • Tree conclave conducted with state forester • Buffer zone planting started Invasives removed • Hazardous trees cut • Science teacher meeting conducted • Website with map, pictures, and descriptions created • Trustees plant two trees • Announcements made in local media.

Q8: If your product owner limits you to three stories from your to-do list for the next iteration, which would you choose and why? If the limit is five stories, which would you choose and why?

Three User Stories:

User Story ID	User Stories	Reason To Include
HAD001	Create a Communication Plan.	Effective communication must be established if the project is to succeed. It guarantees that all stakeholders and team members are informed and on the same page.
HAD002	Identify Potential Species to Add.	Planning and growing the arboretum depend on this. It serves as the foundation for choosing and introducing new species.
HAD003	Determine Sites for More Planting	It is essential for planning and coordinating the planting operations.

Five User Stories:

User Story ID	User Stories	Reason To Include
HAD001	Create a Communication Plan.	Effective communication must be established if the project is to succeed. It guarantees that all stakeholders and team members are informed and on the same page.
HAD002	Identify Potential Species to Add.	Planning and growing the arboretum depend on this. It serves as the foundation for choosing and introducing new species.
HAD003	Determine Sites for More Planting	It is essential for planning and coordinating the planting operations.
HAD004	Select Additional Species	Reassures adherence to the project's goal.
HAD005	Conduct Garden Tour	Demonstrates advancement and involves the community. This may facilitate feedback-gathering as well as community interest and support.

Q9: How do you think the team members should estimate the amount of work they can accomplish during each iteration?

1. **Evaluate the Team's the capacity:** Find out who on the team is available for the next version. This entails being aware of their holiday schedule, other obligations, and work hours. Add up all of the team members' available hours to determine the overall number of work hours available for the iteration (Thompson. K, 2024, para. 13).

2. **Divide Up the Tasks:** Break down the more complex jobs into smaller, more doable tasks or user stories that can be finished in one iteration. Make sure every task is clear and doable. Divide a task like "update master plan," for instance, into smaller ones like "review current master plan," "identify areas for update," and "draft updated master plan."

3. **Calculate the Velocity:** Examine the team's past iterations' velocity, or the quantity of work finished in a specified amount of time. This aids in establishing reasonable goals for the current version. If the project context has changed dramatically or the team is new, start with a cautious estimate and adjust as more information becomes available (Thompson. K, 2024, para. 12).

4. **Effort Estimation:** To determine how long comparable jobs have traditionally taken, utilise historical data from earlier editions. This may aid in the creation of more precise estimations. To estimate the amount of work needed for each assignment, use methods like Planning Poker, T-shirt size (small, medium, large), or story points. To guarantee a variety of viewpoints, the entire team may participate in this.

5. **Task prioritization:** Arrange the tasks according to their relationships and significance. Pay attention to high-value tasks that are of the highest priority. Take into account the project's objectives, which include gaining arboreta status, enlightening the public, and raising the Heritage Center's value.

6. **Capacity Planning:** Balance the team's available capacity with the expected effort needed for the jobs that are prioritised. To avoid burnout, make sure the team's capacity and workload are balanced. Give yourself wiggle room for unforeseen problems or jobs that turn out to take longer than anticipated.

7. **Daily Stand ups / Internal Review:** Hold daily stand-ups to monitor development and pinpoint any obstacles or modifications that are required. By doing this, the group can stay on course and adjust as needed. Conduct a retrospective at the conclusion of each iteration to assess what was achieved, what worked well, and what needs improvement. Apply these suggestions to future approximations.

Conclusion

The Heritage Center's attraction and instructional value were increased when the Heritage Arboretum Development Project attained Level One Arboretum classification. By using an Agile methodology, the project promoted community involvement in environmental education and green space preservation, enhanced rental possibilities, and iterative planning and communication among stakeholders.

Resource Allocation

Task Assigned	Resource	Start Date	End Date	Status
1. List types of decisions that will need to be made and suggest which ones should be made by the Product Owner, individual Team Member, Team collectively, or Scrum Master and tell why that person or group should make the decision.	Indrani	07-02-2024	07-02-2024	Done
2. How can the Product Owner, Scrum Master, and Team Members be more effective using the Agile concepts of simplicity, value, feedback, and change on this project?	Indrani	07-03-2024	07-03-2024	Done
3. What communication challenges is this virtual, volunteer team experiencing and how do you suggest overcoming them?	Gaurav	07-04-2024	07-04-2024	Done
4. Create personas for other stakeholders to show what they want from this project and why.	Gaurav	07-05-2024	07-05-2024	Done
5. Create a backlog of all of the things you may wish to propose for this arboretum. Include artifacts for all three aspects of scope: physical facility, partnerships, and online presence.	Vaishnavi	07-06-2024	07-06-2024	Done
6. Using two releases per year (fall and spring are	Vaishnavi	07-07-2024	07-07-2024	Done

both great planting times), suggest the relatively few items you think should be accomplished in each of the next two releases. Use MoSCoW technique to justify how you prioritize				
7. In what order would you suggest completing the in-progress activities? Why?	Neha	07-07-2024	07-07-2024	Done
8. If your product owner limits you to three stories from your to-do list for the next iteration, which would you choose and why? If the limit is five stories, which would you choose and why?	Neha	07-08-2024	07-08-2024	Done
9. How do you think the team members should estimate the amount of work they can accomplish during each iteration	Neha	07-08-2024	07-08-2024	Done
10. Presentation Content	Everyone	07-06-2024	07-08-2024	Done
11. Presentation Design	Vaishnavi	07-09-2024	07-09-2024	Done
12. Google forms	Neha, Vaishnavi	07-09-2024	07-09-2024	Done

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