

TIME TO DO SOME SERIOUS STAKEHOLDER ENGAGEMENT

Assignment: A Day In The Life Of A Product Owner

This is an individual assignment, not a team one. Your instructor will provide you with a vision statement for a project along with some background information (these resources are appended to this document). Your task is to build an initial product backlog. You'll do this by engaging with your key stakeholder, who will be represented by your instructor or a delegate. You will get a single 30 minute chance to meet with your key stakeholder and elicit requirements.

WHAT TO DO

Here's a checklist to help you complete this assignment.

Book a meeting. When you are ready, book a meeting with your key stakeholder. It's up to you to organize all the details of the meeting (where & when). The meeting cannot run longer than 30 minutes.

Prepare for the meeting. You should organize a set of clear questions to ask your key stakeholder. Your goal is to uncover requirements for the project. You do not have much meeting time, so the more prepared you are, the more requirements you will elicit.

Have a strategy for collecting information. You will have to figure out how to capture the information raised in the meeting. Video/audio recording is not permitted.

Meet with your key stakeholder. Note that every aspect of your interaction with your key stakeholder is assessed for professionalism. You don't need to dress formally, but you should otherwise immerse yourself in the role of a professional. This assignment is modelled on a real-life project worth over \$500,000 to a software consulting company.

Send a follow up email message. You can send a single follow up email message without attachments to your key stakeholder. In this message you can ask two more questions to clarify information from your meeting. You cannot ask about new requirements, only clarifications, and the questions cannot be open-ended.

Analyze the information you collected. Convert the answers to the questions you asked into user stories. Eliminate duplicates and test your user stories against appropriate criteria.

Build a product backlog. Prioritize your user stories by value. You do not need to add acceptance criteria or do task breakdowns on these user stories.

Submit your work. Please use the link provided by your instructor, and use this question guide:

Worksheet: A Day In The Life Of A Product Owner

Worksheet Code: ADPRWL

Q1. Please paste in the vision statement for the project you were assigned.

Q2. Please paste in your product backlog with each user story starting on a new line and numbered. A blank line between each user story is appreciated.

Q3. What was your strategy for capturing requirements in your key stakeholder meeting?

Upload the .zip confirmation file to D2L. After you submit your worksheet, you should get a confirmation file. It is normally downloaded automatically as soon as you submit your worksheet. If you don't see it, check that your browser is not blocking it. Please upload this confirmation file to D2L using

Assignment Dropbox: A Day In The Life Of A Product Owner.

HOW TO GET TOP MARKS

Remember: stakeholders are not necessarily good at describing requirements. They depend on you to guide them through a detailed description of their needs and wants. Don't just show up to your key stakeholder meeting and try to wing it. Study the vision statement & project background. Prepare a list of thoughtful questions about the project. Be prepared to improvise new questions during the meeting. Have a good strategy for capturing answers!

Also, please keep in mind that every aspect of your interaction with the "stakeholder" is assessed for professionalism, including email messages. You don't need to dress up, but you need to otherwise immerse yourself in the role of a professional interacting with a client. If your "stakeholder" happens to be your instructor, kindly forget that for this assignment!

Other than that: avoid submitting incomplete or superficial work; don't plagiarize; follow submission guidelines properly and submit on time!

ASSESSMENT CHECKLIST

Here's the grid we'll use to assess your work.

Product backlog identifies main requirements of project	/50
Product backlog is prioritized by value	/20
Professionalism & meeting conduct	/30
Total	/100
Spelling/grammar/sentence structure (@5 each)	
Plagiarized or unoriginal work (0% + academic sanction)	
Total adjusted	/100

CASE STUDY: REGISTERING STUDENTS FOR YELLOW BUS TRANSPORTATION

Vision Statement

For parents of school-age children who need a way to arrange yellow bus transportation to and from school, the online registration system is a booking website that offers a simple and fast way to sign up for transportation services, and unlike the traditional paper-based system, it is efficient, reliable, and can be completed from home.

Background

The Calgary Board of Education has over 120,000 students, and over 35,000 of these take yellow school buses to and from school each weekday. The provision of these transportation services is governed by directives and policy set down by the Alberta Ministry of Education. Presently, parents of students requiring transportation are expected to complete a four-page contract, which is manually transcribed into a rudimentary database and then painstakingly analyzed to determine a suitable deployment of bus routes and bus stops.

The process is very inefficient. Parents must submit their paper-based applications in the month of June preceding the school year because it takes staff the entire summer to sort out routing. This presents a barrier for parents arriving late into the city, or switching from another school, or simply moving over the summer.

Yellow bus service is contracted out to third party providers. Each bus in service costs \$60,000 per school year to operate, regardless of the number of stops or routes or schools visited. The CBE attempts to minimize the number of buses in service, but is constrained by the volume of students and the fact that students must arrive at school in the morning in a narrow time window (typically 0745h to 0915h). The CBE cannot say with certainty if the route planning is optimal because it is done by a group of people who divide the city into regions and plan using essentially a manual greedy algorithm (i.e. pins on a map). In addition, the set of students requiring transportation is constantly shifting during late summer and early fall, even after the start of the school year.

Many students are registered incorrectly, or not at all. Often, bus stops are not placed in locations that are equitable to all students in the area (some students have to walk significantly further than others). Under the current policy, parents are expected to pay for this service, and there are a large number of unsettled accounts because there is no system in place to track which students actually ride the buses.

This is a highly constrained optimization problem. In addition to students and schools distributed all over the city, there are business rules constraining routing:

- yellow bus stops cannot be placed on major roadways for student safety
- the number of bus stops must be minimized as it slows down the route
- siblings who attend the same school always travel on the same bus
- students must arrive at school by the "bell time" for that school

- adjacent schools can be served by the same busing routes
- buses have a maximum student capacity (72 for large buses, 24 for small buses)
- bus service is not available to students who reside within a "walk zone" from their school
- some students live at multiple addresses (parents are separated)
- buses must reach dropoff stops in the afternoon in a consistent time window (parents are waiting)

The CBE has set out to automate the registration process. They plan to eliminate paper forms and move the entire registration system online, so that the time-consuming step of collecting route requirements is automated. They have reached out to you as a software development professional to create an initial product backlog for student registration. You can do this by eliciting more information from the key stakeholder in a time-limited engagement session.

Resources

CBE Transportation

<https://www.cbe.ab.ca/schools/busing-and-transportation/Pages/default.aspx>

Notes

This is a mock project based on a real one. Please do not contact the CBE for information.