

Document Name	Individual Assignment 1
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Project Name	Implementing self-checkout kiosks at the college's bookstore
Client	Baruch College
Project Owner	Darya Filipchuk
Course Number	CIS 5800
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Contact Information

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Business Case

<p>Introduction</p> <p>Baruch College's business goal is to create the best quality self-checkout system which will be installed in desktop computers located in the bookstore near exit. There should be enough computers in the store to avoid line formation. The College will make revenue on attracting students with easy-to-use self-check-out systems without waiting in long lines.</p>
<p>Objectives</p> <p>Baruch College's strategic goal is a continues growth and profitability. The College will increase its profit by decreasing number of employees at the bookstore as well as expected increase in number of sales. The increase in number of sales is expected by providing a better and easier service at the store.</p>
<p>Project Requirements</p> <p>Self-checkout station must be offered in desktop version. Unit shall provide a shelf or sufficient counter space for patrons to place personal items for the duration of the checkout. Self-checkout system must have a touchscreen interface, ability to design and configure a high-contrast interface, and large type size. Self-checkout station must have a credit card payment system. The system must have intuitive software that promotes the College's upcoming events and programs. Desktop units must have colored status lighting for staff to easily see alerts and warnings from a far distance without being directly in front of the kiosk. Paper receipt printer must be conveniently accessed to allow store staff to quickly unlock and replace paper in seconds. Self-check kiosk must be able to read store product barcodes. The system must operate on the College's network.</p>
<p>Budget Estimate</p> <p>A preliminary estimate of costs for the entire project is \$51,900. This estimate is based on the project manager working about 30 hours per week for one months and other internal staff working a total of about 80 hours per week for one months. A staff project manager would earn \$60 per hour. The hourly rate for the other project team members would be \$80 per hour. The initial cost estimate also includes \$15,000 for purchasing computers from suppliers. After the project is completed, maintenance costs of \$4,000 are included for each year, primarily to update the information and coordinate the</p>

Ask for Help feature. Projected benefits are based on a reduction of working hours of employees of the bookstore. The estimated payback is within two years.

Schedule Estimate

The project owner would like to see it ready in one month, but the timeframe is flexible and may be extended. It is also assumed that the system will have a useful life for at least five years

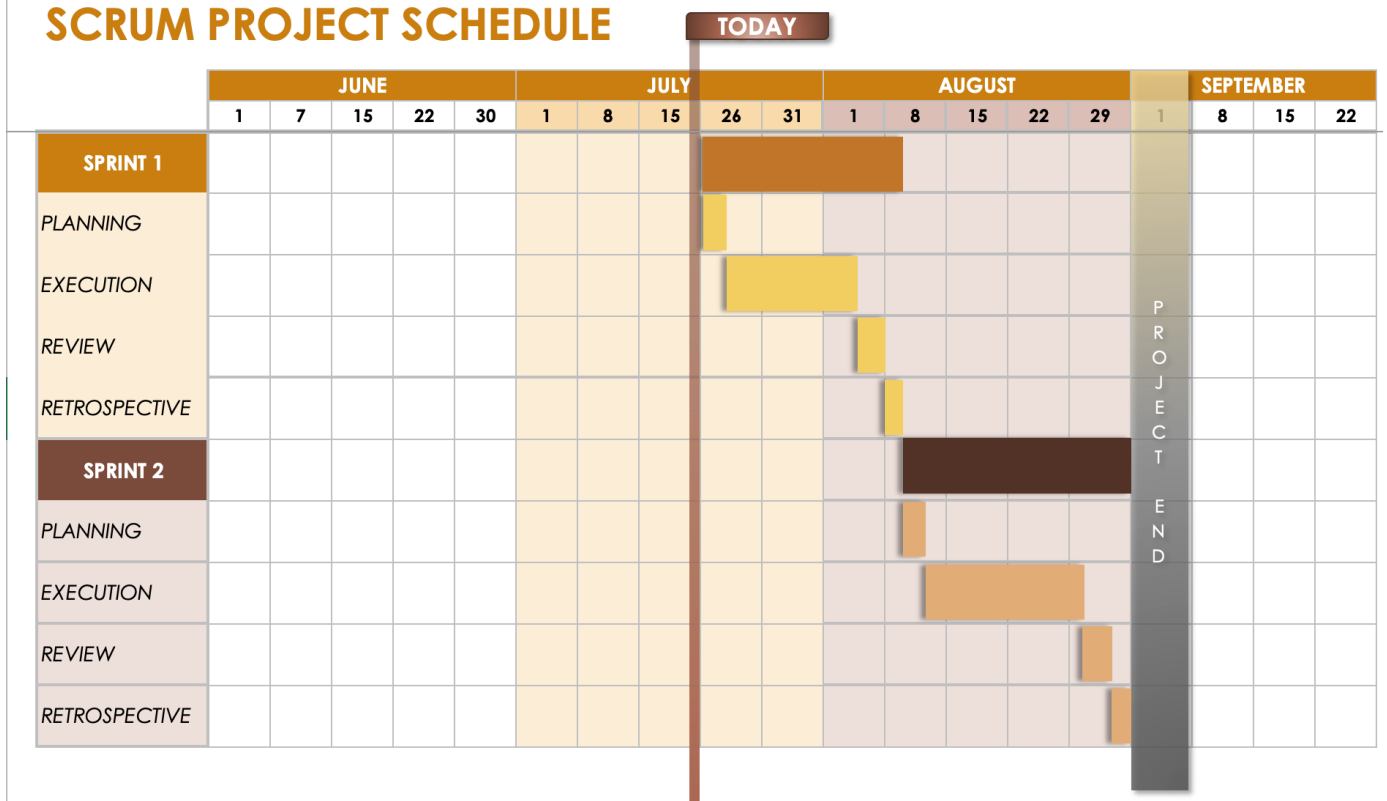
Software Development Approach:

Scrum methodology: works best for the system that is built because it allows the team to break down the project into smaller iterations and continuously improve each step as more feedback is gathered.

Product Backlog

ID	As a...	I want to be able to...	So that...	Priority	Sprint	Status
001	Customer	Scan barcodes	I don't spend time typing it in	High	1	To Do
002	Store Staff	See status lighting for alerts and warnings from far distance	I don't have to be near the kiosk all the time	High	2	To Do
003	Customer	Use a touchscreen	It's easier to navigate thru the system	High	1	To Do
004	Customer	Pay with a credit card	Transactions go faster and I don't need to wait for change	High	1	To Do
005	Admin	Display promotions and events	Attract more visitors and customers	Medium	2	To Do
006	Admin	Access the system thru college network	I see issues or add things up from my PC	High	1	To Do
007	Customer	Get physical printed receipts	I'm confident I have a proof of purchase	High	2	To Do
008	Customer	Get electronic receipt	I can review it via PC or phone and save for references	Moderate	2	To Do
009	Customer	Purchase several Items	I don't need to buy them separately	High	1	To DO
111010	Customer	Remove scanned item	I don't need to pay for items that I decided not to buy	High	2	To Do
011	Customer	Use coupons and student discounts	I pay less	Low	2	To Do
012	Admin	See daily reports	I see store selling performance	Moderate	2	To Do
013	Customer	Ask for help	I get an assistance from staff when needed	High	2	To Do
014	Admin	create inventory	The system has all prices and barcodes of the products	High	1	To Do
015	Admin	See quantity sold	I know what product to order	High	1	To Do

SCRUM PROJECT SCHEDULE



PROJECT COST ESTIMATE				
	#Units/hours	Cost/Unit/hour	Subtotal	Total
Project Management				45000
Project manager	150	60	9000	
Project team members	450	80	36000	
Hardware				9800
Desktop Computers	7	950	6650	
Payout machines	7	300	2100	
Alarm lightings	7	150	1050	
Training and Support				320
Trainee cost	8	40	320	
Reserves (20% of total estimate)				11024
Total Project Cost Estimate				66144

Three-Sphere Model of the System Management

Organizational Issues	Business Issues	Technology Issues
<ol style="list-style-type: none">1. Do students and other customers need to be trained how to use the system and who's going to do that?2. Will the new system improve the store's performance?3. How will the new system affect customers who's not technology friendly?	<ol style="list-style-type: none">1. What will the system cost to the college?2. What will support cost be?3. How will the invention of the system impact on books prices?	<ol style="list-style-type: none">1. Should the system be based on Windows or Macs?2. What will the hardware specification be?3. How will the number of kiosks affect the network and speed?

Quality Control Activities

Customer Satisfaction

Without customer satisfaction there can be no quality. Even if a deliverable meets all aspects of what the customer or stakeholder has required but is done so where the process itself was not too satisfactory, then there's a problem.

Of course, the deliverable must meet those requirements, or else the project has failed because the product of the project and the management of the project didn't meet with the expectations of the customer or stakeholder.

That's why implementing quality control means managing both process and people. Meet with your customer or stakeholder regularly to keep them abreast of the project's progress. Get their feedback and make sure that you're being fully transparent with them to avoid issues arising later.

Prevention Over Inspection

Quality doesn't come free. The Cost of Quality (COQ) is the money spent dealing with issues during the project, and then after the project, to fix any failures. These are broken up into two categories: cost of conformance and cost of nonconformance.

The cost of conformance can be considered a preventive cost. These costs are primarily related to training, the documentation process, equipment needed, and the time required to get the quality done right. Other costs related to this can include testing, destructive testing loss and inspections.

The cost of nonconformance refers to internal failure costs. These consist of having to rework something or even scrap it entirely. Further costs can come from liabilities, warranty work and lost business.

Continuous Improvement

The concept of quality project management is an ongoing effort to address improvements of the deliverables over time. Whether through small, incremental changes or through large ones, the opportunity to identify and address change is always present.

Applying this concept also means constantly monitoring and documenting any issues that come up, so you can then use the lessons learned when managing future projects. This way, you run a more efficient project and likely won't repeat mistakes.

Processes that will be used to measure Project Performance:

1. **Schedule.** Whether or not the team kept to the original timeline.
2. **Quality.** Whether or not the result meets the Definition of Done.
3. **Cost.** Compare the current actual spent to what was originally budgeted.
4. **Stakeholder Satisfaction.** Find out how Stakeholders feel about the project and what could be done differently.

Communication Management

Daily Scrum events will be used for communication. Meeting will be held every day for 15 minutes to inspect Sprint progress towards the Sprint Goal and adapt the Sprint Backlog. To reduce complexity, it will be held at the same time and place every working day of the Sprint. Daily Scrums should improve communication, identify impediments, promote quick decision-making, and consequently eliminate the need for other meetings. Developers may communicate to each other during the day when needed using tools of communication of their choice.

Risks Management

Time Constraints is the highest risk because the project owner wants the project to be finished in one month. For that reason, Scrum approach was chosen to implement the project. Scrum team will strictly attend all Scrum events to make sure they are on the right track and working towards the Sprint Goal.

Resource Management

The team will have to manage three types of resources: Finances, Equipment and Space. The team will have to make sure they finish the project on time because time costs money. There is 20% in Reserves which is more than \$11,000 which give a little bit of flexibility but still the team should work towards the Project Budget. The team will have to find all necessary equipment for kiosks to work which include desktop computers, alarm lighting and payout machines. There is a lot of choice on the market, so there will be no problem in finding the right equipment. But still, the team must stick to the Project Budget. Space that will be taken for kiosks installation shouldn't make an impact on the size of bookstore inventory. Everything should be organized in a way that doesn't decrease number of offered items for sale in the store.

Work Cited:

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