

CSE 471: SYSTEM ANALYSIS
& DESIGN

MIDTERM

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SECTION: 07

(1)

	Year 0	Year 1	Year 2	Year 3	Total
Total Benefits	30 000	35 000	30 000	50 000	145 000
Total Costs	72 000	22 000	10 000	17 000	121 000
Total Net Cashflow	[42 000]	13 000	20 000	33 000	
Commulative net cashflow	[42 000]	[29 000]	[9 000]	24 000	

$$\text{BEP} = \frac{\text{no. of years of -ve net cashflow} + \frac{\text{that year's net cashflow} - \text{that year's commulative cashflow}}{\text{That year's net cashflow}}}{}$$

$$= 3 + \frac{33\ 000 - 24\ 000}{33\ 000}$$

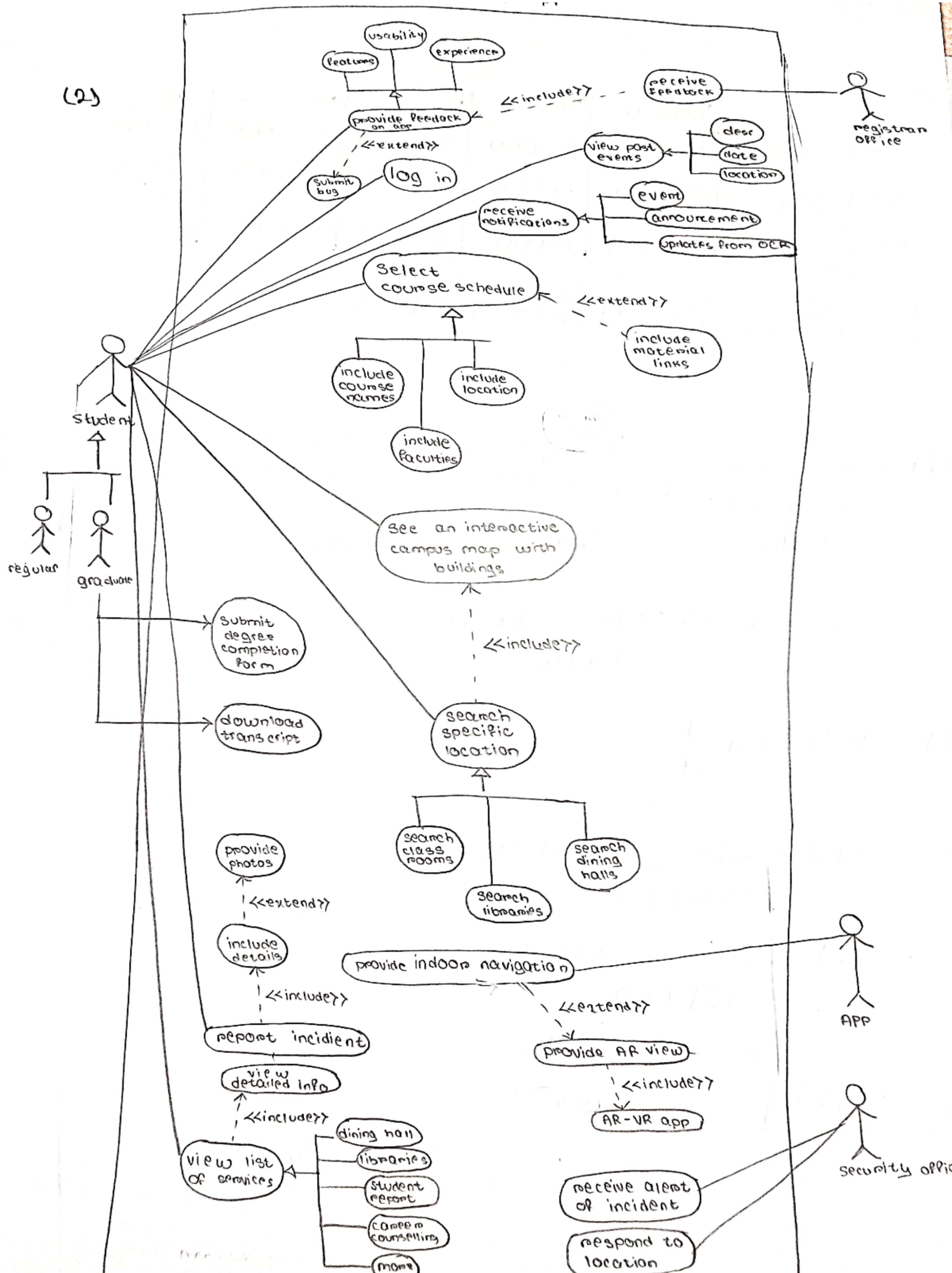
$$\boxed{\text{BEP} = 3.27 \text{ years}}$$

$$\text{ROI} = \frac{\text{Total Benefits} - \text{Total Costs}}{\text{Total Costs}}$$

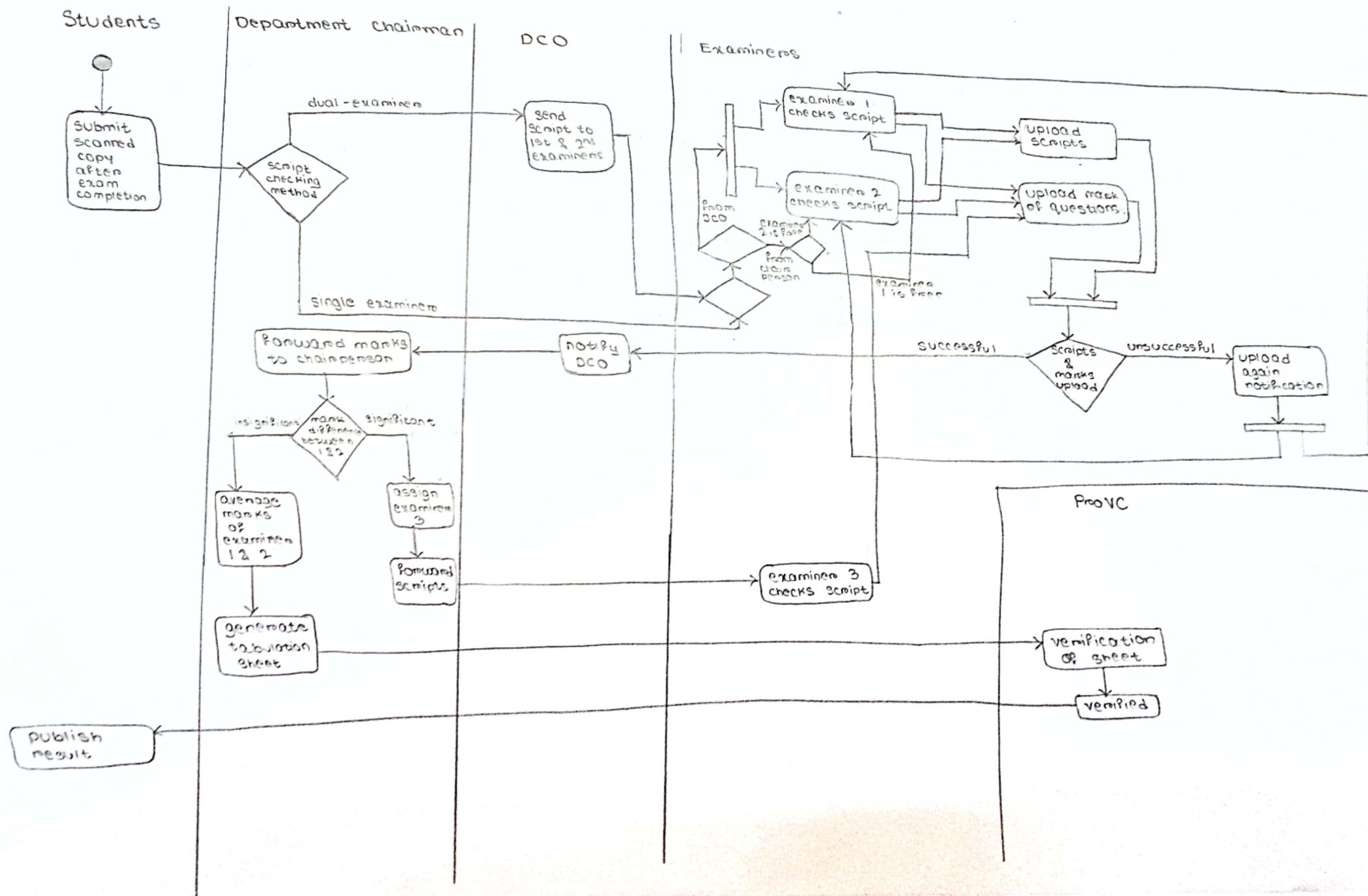
$$= \frac{145\ 000 - 121\ 000}{121\ 000}$$

$$\boxed{\text{ROI} = 0.198}$$

(2)



(3)



LA

Student



Exam System

Exam Interface

Proctoring System

Evaluation System

startExam()

validates student

loads Questions (instoring)

showQuestion()

activateNow()

access webcam & mic()

submitAns()

[Find = suspicious? count = 1]

message() = warning

[Find = suspicious, count = 2]

message() = pause & freeze()

checkSession()

alt

