

**LECTURE 7:
WRITING IN THE FIELD OF
COMPUTER SCIENCE**

Writing Project Proposals

TIPS TO CREATE BETTER
PROJECT PROPOSALS

PROJECTMANAGER.com

The infographic features five icons, each with a corresponding tip on a blue ribbon below it. The icons are: a calendar for 'PLAN AHEAD', a megaphone for 'GET ATTENTION', a target with an arrow for 'BE PRECISE', a checklist for 'CLEAR GOAL', and a line graph with an upward arrow for 'HISTORIC DATA'.

- PLAN AHEAD
- GET ATTENTION
- BE PRECISE
- CLEAR GOAL
- HISTORIC DATA

WHY IT'S NEEDED

- ◉ To get approval.
- ◉ To get sponsoring.
- ◉ To get funding.



You need to convince someone.

GENERAL POINTS

- ◉ **Introduce** yourself and your project.
- ◉ **Describe** the **need** and how the project will meet that need.
- ◉ **Provide** the **details** of what you propose to do and explain the costs.
- ◉ **Persuade** your readers that you are the perfect choice to successfully complete the project.
- ◉ Finally, you should end with a "**call to action**", requesting readers to take the next step.
 - setting up a meeting, signing a contract, voting for your ideas; whatever makes sense for your project.

KNOW YOUR AUDIENCE

- ⦿ Any reader will want to know **why** you are proposing the project to them.
- ⦿ You need to **convince** the readers that it's in their best interest to support your project.
- ⦿ You need to write a **customized** proposal.

COVER LETTER

- You may need to start your proposal with a **Cover Letter:**
 - A brief personal introduction of yourself and your project.
 - The **action** you want them to take after reading your proposal.
 - **Contact information.**

COVER LETTER

Name of receiver

Company name

Address

Phone number

Dear (name of the receiver),

I am writing this letter to submit an interesting proposal which will make it possible for you to decrease your costs by 50%. We have applied the same for our previous customers and it is our goal to spread the method among other prospective clients.

Our company will review the system that your company uses and our aim is to find the loopholes. Then we will look for remedies to improve the system. We could start by decreasing the stationery and printing costs and by turning your hard copy documents into digital ones. This way you will be able to save money and paper.

I will call you as a follow-up of the business proposal. I hope that we will be able to work together in a manner that is advantageous for the both of us.


Yours sincerely

Name of sender

TITLE PAGE

- Next, create a **Title Page** with the title of your specific proposal, for example:
 - "Streamlining Our Order Process"
 - "Rehabilitating the Parkview Playground"
 - "Converting XYZ's Corporate Fleet to Hybrid Vehicles"
 - " Candy Crush Project" 😊

TITLE PAGE



Ain Shams University
Faculty of Computer and Information Sciences

كلية الحاسب والمعلومات
AIN SHAMS UNIVERSITY

Candy Crush Game

Under Submission of Structured Programming Course 2019

Team members:

1. XY Z
2. ABC
3. 123

Under the Supervision of:

1. Dr. Yasmine Aly
2. TA.

17-Mar-19

SUGGESTED CONTENT

1. Introduction:

- What is the **history** of the problem?
- Why is this problem **interesting**?
- Is the problem already **solved**? What is **done** now?
- Are there any **similar systems** or solutions to the one you propose?
- Are there possible **improvements** to current solutions?

SUGGESTED CONTENT (CONT.)

2. Project Summary

- What in **general** will this project achieve?

3. Project Details

- **Architecture and Environment:** Describe the project environment (*software, hardware, languages, organizations, etc.*)
- **Implementation Issues and Challenges:**
 - What will be the most **difficult** issues and challenges in the implementation?
 - How are you using or **extending** current tools/systems for your problem?
 - What makes your project **unique**?

SUGGESTED CONTENT (CONT.)

3. Project Details (cont.)

■ Deliverables

- What will the project **produce**? (*program, report, etc.*)
- **Describe** in relative detail the **features** of each of the project's products.
- **Emphasize** what your project **contributes** or achieves.

■ Time Plan

- Provide an **estimated timeline** of project deliverables and **important dates**.

SUGGESTED CONTENT (CONT.)

4. Conclusion:

- Summarize the project including the *problem, motivation, and proposed solution, and re-state important (planned) contributions.*

5. References

- List references used to compile proposal and references that will be used for project (if already known).

SAMPLE PROPOSALS

- Course Project Proposal
- Graduation Project Proposal
- <Graduation> Project Documentation Template.

Code Documentation

CODE DOCUMENTATION

- ◉ Code documentation is a process by which a programmer **documents his/her code**.
- ◉ **Lack of purpose** to write it leads to poor code readability and hard maintenance for other members.
- ◉ If developer **follows programming language coding conventions and maintains variable readability, code comments and modularity, the code documentation can be minimal**.
- ◉ **Not lengthy** documents especially in **Agile teams**.
- ◉ For **faster documentation** process and style consistency, **use code documentation tools**.

WHY IS IT IMPORTANT

- The lifetime of a software is
 - 10% development
 - 90% maintenance 😊
- Maintenance is where comments can be useful.
- Developers don't stay for the whole life cycle.
- Lack of comments will eventually lead to lost productivity due to time spent tracing and re-learning.

EXAMPLE ON CODING

Program 1

```
int myfunction ( int sally, int salwa)
{
    return sally+salwa;
}

void main()
{
    int ahmed, mahmoud;
    cin>>ahmed>>mahmoud;
    cout<<myfunction(ahmed,mahmoud);
}
```

Program 2

```
// This function is to add 2 integer numbers
int Add( int num1, int num2)
{
    return num1+ num2;
}

// This is the main
void main()
{
    int operand1, operand2; // declaring 2 variables
    cin>>operand1>>operand2; //input
    cout<<Add(operand1,operand2); //addition & output
}
```

**When I wrote this code,
only God & I understood what it did.**



**Now...
only God knows.**

CODE DOCUMENTATION BENEFITS

- ◉ You will **get back** to your code after some time! It's better to **write it now** than **regret later**.
- ◉ You want your code to be **maintained and used by other programmers in the team**.
- ◉ You need **others to help** you out through open source and other **collaborations**. If you are thinking of going collaborative, start documenting your code!
- ◉ You want to become a **better coder!** Documenting your code makes logic much more clear to you.

GUIDELINES

- ⦿ Don't rely on comments only, write readable code.
- ⦿ One liner comment is best.
- ⦿ Write in English.
- ⦿ Don't comment the obvious.



```
//The width of the line is 2  
lineWidth = 2;
```

GUIDELINES

- ⦿ Don't write what the code is doing.
- ⦿ Always write why you are writing this piece of code.
- ⦿ Both writing no comment and writing too much comments are bad

ENJOY 😊

- ◉ Watch this video by our former students (graduates of 2018) on how important to use useful variable/function names.

https://m.facebook.com/story.php?story_fbid=2388887967796739&id=2388033304548872

Minutes of Meeting

Dr. Yasmine Afify

Minutes of Meeting (MoM)

- Notes are kept regarding the important topics discussed in a meeting and the important decisions.
- Minutes are a tangible record of the meeting for its participants and a source of information for members who were unable to attend.
- In some cases, meeting minutes can act as a reference point.

Who Takes The Notes

- Secretary
- Rotate around attendees

Steps

- Pre-planning
- Record taking
- Transcribing minutes
- Distributing or sharing
- Storing for future reference

1. Pre-planning Minutes of Meeting

A well-planned meeting helps ensure effective meeting minutes.

Preparation for the meeting includes gathering

- The agenda
- Minutes from the last meeting
- Any documents that will be discussed at the meeting
- Recorder

2. Record taking: what should be included?

- The purpose of the meeting and who is leading it
- Date and time of the meeting
- Names of the meeting participants and those unable to attend
- Start and End Time
- Decisions made about each agenda item, for example:
 - Actions taken or agreed to be taken
 - Next steps
 - Voting
 - New business
 - Next meeting date and time

Important Tips

- Create an outline
- Check-off attendees as they enter the room
- Record decisions or notes on action items
- Ask for clarification if necessary
- Don't try to capture it all

3. Transcribing the Minutes

- Once the meeting is over, it's time to pull together your notes and write the minutes.
- Try to write the minutes as soon after the meeting as possible while everything is fresh in your mind.
- Review your outline and if necessary, add additional notes or clarify points raised. Also check to ensure all decisions, actions and motions are clearly noted.
- Edit to ensure brevity and clarity, so the minutes are easy to read.

4. Distributing or Sharing Minutes of Meeting

As the official “minutes-taker”, your role may include dissemination of the minutes via

- Email or
- Memo

Example/Templates

Minutes of the Glee Club, Kennesaw State University

January 15, 2018

Time: 2:45 p.m.

In attendance: Marty Spriggs, June Ballast, Dena Wilson, Melinda Morris, Jim Carsen, Cynthia Nguyen, Sally Trutherwell, Casey Dixon, Sam Tinterfuller, Bev Zender, Allison Whitney, Levi Webre, Alex Fox, Joshua Azriel, Laronda Tucker, Gladys Edeh, Kyle Cooke, Minnie Lu Drye.

Monthly Parking Permits

Discussion: There is a proposed increase in the cost of monthly parking permits on campus. This year it will be \$28 per month, an increase of \$3 over last year's monthly feeds. The group agreed that they will protest the parking permit price increase. It was noted that we can park for \$5 per month off campus and ride a free shuttle to campus.

Action Items: A resolution was passed unanimously to protest this increase.

Semester Schedule

Discussion: Jim and Cynthia discussed the type of music acts that we should bring to campus this semester. With the current policy of up-front deposits required by Shady Hat Productions, we have to be sure we don't book any weak acts, which would cost us our whole budget for the year.

The meeting adjourned at 3:45.

Meeting Title | MINUTES

Meeting date | time Date | Time | Meeting location Location

Meeting called by	Name	Attendees
Type of meeting	Purpose	Attendees
Facilitator	Name	
Note taker	Name	
Timekeeper	Name	

AGENDA TOPICS

Time allotted | Time | Agenda topic Topic | Presenter Name

Discussion Conversation
Conclusion Closing

Action items	Person responsible	Deadline
Topic 1	Presenter Name	Date time
Topic 2	Presenter Name	Date time

Time allotted | Time | Agenda topic Topic | Presenter Name

Discussion Conversation
Conclusion Closing

Action items	Person responsible	Deadline
Topic 1	Presenter Name	Date time
Topic 2	Presenter Name	Date time

Time allotted | Time | Agenda topic Topic | Presenter Name

Discussion Conversation
Conclusion Closing

Action items	Person responsible	Deadline
Topic 1	Presenter Name	Date time
Topic 2	Presenter Name	Date time

Meeting Name

Date // Time

Purpose: [insert here]

Outcome: [insert here]

Attendees: Enter attendees here

Agenda item: Enter agenda item here

Discussion: Enter discussion summary here

Action items

- ✓ Enter action items here
- ✓ Enter action items here
- ✓ Enter action items here

Person responsible

Enter person responsible here
Enter person responsible here
Enter person responsible here

Deadline

Enter deadline here
Enter deadline here
Enter deadline here

Agenda item: Enter agenda item here

Presenter: Enter presenter here

Discussion: Enter discussion summary here

Action items

- ✓ Enter action items here
- ✓ Enter action items here
- ✓ Enter action items here

Person responsible

Enter person responsible here
Enter person responsible here
Enter person responsible here

Deadline

Enter deadline here
Enter deadline here
Enter deadline here

Agenda item: Enter agenda item here

Presenter: Enter presenter here

Discussion:

To get started right away, just tap any placeholder text (such as this) and start typing to replace it with your own.

Action items

- ✓ Enter action items here
- ✓ Enter action items here
- ✓ Enter action items here

Person responsible

Enter person responsible here
Enter person responsible here
Enter person responsible here

Deadline

Enter deadline here
Enter deadline here
Enter deadline here

Any open questions remaining:

Thank you