

# MSc Final Year Project Generic Briefing Project Proposal

# Overview

This briefing is regarding generic skills and information that apply to the programs mentioned below.

- MSc Computer Science
- MSc Information Technology
- MSc Advanced Computing Technologies
- MSc Data Science
- MSc Information Systems and Management
- MSc Computing for the Financial Services

A separate part of the briefing will be dedicated to program specific information

# Overview

This presentation covers

- Contacts
- Plagiarism
- Ethics
- Project?
- Picking a project topic (if you did not do so yet)
- Project Proposal Generic
- Project proposal advice
- Working on the project proposal

# Contacts

# Contacts

- Your Project Supervisor
- Your Program Administrator
- Your Program Director
- Systems group: [sg@dcs.bbk.ac.uk](mailto:sg@dcs.bbk.ac.uk)
- The Project Coordinator: Oded Lachish
- Intranet pages

[https://www.dcs.bbk.ac.uk/intranet/index.php/MSc\\_Student\\_Projects](https://www.dcs.bbk.ac.uk/intranet/index.php/MSc_Student_Projects)

You will find all the deadlines and their explanations here

# The roles: Your supervisor

Your supervisor should usually be able to:

- answer any question that you have, or
- refer you to someone that can.

However, due to the broad nature of projects there may be specific things that your supervisor cannot answer.

# The roles: Your project director

- According to college regulations, the project directors are responsible for defining the projects.
- Any general issue regarding the nature of the project that needs elaboration, they are the address.

# The roles: Admin

- They are your address for any administrative issues, such as problems with submission, access to Moodle etc.



# The roles: Systems Group

- The final code in project should be submitted to a Github repository, if you have any issues with that, then please refer to them.
- If you have any issues with the tools running on departmental computers, then please refer to them.

sg@dcs.bbk.ac.uk

# The roles: Project Coordinator

- If you have any issues with your supervisor (these are very rare), then please contact the Project Coordinator as soon as possible.

# Intranet pages

Access to the pages requires your departmental password!

If you have problems with this, then please contact the systems group.

On the intranet pages you will find a lot of information, including links to

- Samples of Project Proposals
- Samples of Project reports

**Please understand:** We are forbidden to provide any information regarding the grades these documents received. Even implicit information.

So, please refrain from asking for such information.

# Plagiarism

# Plagiarism

- Unfortunately, there have been a few cases of plagiarism recently here at the Department
- This is an important topic, as the penalty for plagiarizing work can be very severe
- Plagiarism is using words and ideas from another text without proper acknowledgement
- The College's **PLAGIARISM GUIDELINES**  
(<http://www.bbk.ac.uk/student-services/exams/plagiarism-guidelines/>)  
and penalties

# Copying and collusion

- Copying the whole, or substantial parts of information (e.g. text, images) from a source (e.g. journal article, book, website, or any other source, both hard copy and online material) without proper acknowledgement. Proper acknowledgement includes the use of quotation marks around copied text, an in-text citation and a reference.
- This also includes copying from your peers (even with their permission), and submitting it as your own work. Unless otherwise advised, all submitted assessments should be your work alone.

# Purchasing ready-made assessments

- Paying someone else to do your assessments is also considered plagiarism, and is a very serious assessment offence.

# Self-plagiarism

- A special case of plagiarism is submitting work you previously submitted for another assignment. This is also considered an assessment offence, as you have already received feedback on that work (unlike your peers).
- This includes assessments you have submitted in previous years, on different modules, or in previous universities. Birkbeck uses Turnitin (used by the majority of UK universities) to check, which usually detects these types of plagiarism.
- If you want to rework a paper for an assignment, ask your lecturer whether this is acceptable, and if yes, whether and how you should acknowledge your reworking.



# Inadequate paraphrasing

- This occurs when only small changes relating to word or phrase order and word replacement are made, but the overall structure of the text is maintained. These types of superficial changes are not enough to avoid plagiarising.
- To avoid plagiarism, you must fully rewrite the source text in your own words.

# Avoid plagiarism

When in doubt, ask your supervisor

See

<http://www.bbk.ac.uk/student-services/exams/plagiarism-guidelines>

for College guides and policies on plagiarism.

From experience, students do not have initial intentions to plagiarise.

- This usually happens, when corners are cut because of time management issues.
- If you are stuck, please contact the your supervisor and do not wait too long.
- The supervisor is there to help you, and being stuck is definitely a good reason to ask for help.

If you ran out of time it is **better to defer than to be caught plagiarising!**

(it is amazing what Turnitin catches, and PDF images with loads of text, raise suspicions).

# Avoid false positive

Please do not do one of the following, since otherwise you may find yourself explaining why you did not plagiarise.

- **Put any of your work in the public domain**
- **Ask someone else to check your work on Turnitin**

Once, the submission deadline is over this does not apply anymore.

# Ethics

# Ethics

According to the Birkbeck, University of London Responsibilities and Procedures for Ethical Review

- Ethical requirements arise from an evolving understanding of the rights and duties of human beings. Ethics are broader than law, though the law can both reflect and clarify ethical duties. Birkbeck staff and students are expected to exercise ethical principles of honesty, rigour, transparency, care and respect in relation to all their activities, including the planning and conduct of research.
- All activities carried out by Birkbeck staff and students that involve one or more of:
  - intervention or interaction with human participants;
  - the collection and / or study of data derived from human participants;
  - a potential impact on animals or the environment;
  - a potential risk of significant reputational damage to the College
  - requiring an individual to step outside accepted regulatory or legal norms

# Ethical Issues

## The bottom line

- If you have any (even if you do not collect any information) interaction with human participants you will need to:
  - Tick a dedicated box in your project form; and
  - Discuss it with your supervisor.

For extra information see [https:](https://www.dcs.bbk.ac.uk/intranet/index.php/Research)

[www.dcs.bbk.ac.uk/intranet/index.php/Research](https://www.dcs.bbk.ac.uk/intranet/index.php/Research)

# Project?

# Why do we make you do a project?

Offer students the opportunity to

- Plan and execute a major piece of programming work that requires knowledge the use of knowledge obtained from numerous modules
- Gain experience in communicating complex ideas/concepts and approaches/techniques to others by writing a comprehensive, self-contained report
- Develop their portfolio



# Project content

The project needs to have a significant programming/data analytics effort (except for special cases in MSc IT)

- Your supervisor is your go to address on the subject

The project proposal/report need to be written well

- Your supervisor is your go to address on the subject

Please Note

- You are judged on your programming effort and quality of your reports
- The topic is not judged

# Topic

# Choosing the project topic

- It is the students responsibility to choose a topic for their project
- The supervisor can help
- It is best to set the first meeting with your supervisor starting with a one paragraph describing your idea in general (hopefully, you already met your supervisor)
- If you have a problem choosing your idea, you should contact your supervisor without one
- Not having an idea is not an excuse not to contact your supervisor!

# Choosing the topic of your project, Generic Advice

- The projects on the MSc programmes do not have to be novel ideas
- The work you do **MUST** be your original work
- The project is not about the choice of topic, it is about software engineering / data science!

If you have a problem coming up with your own idea pick

Remember:

- your idea does not need to be original

You can choose to pick the idea to be

- any application you like or just encountered,
  - a game you like to play, and
  - the idea of a different project.
- Pick anything that will get you started and enable you to start working on your project for real.
  - Once you start your supervisor may suggest other options.
  - It is your responsibility to ensure you have an idea.

# Generic Advice

- Do not be a perfectionist, a perfect idea does not exist! (but google glasses is a perfect idea)
- If you have numerous ideas, pick one and pitch it!
- How?
  - pick the one you like best,
  - If you can not pick one, then pick at random.
  - What about the rest of the topics? when setting a meeting with a potential supervisor you can also say that you have other options if they think the current is not viable
  - Note that the ability to choose one topic is a good skill to have

# Project Proposal Generic

# Project proposal

- Word count 2000-3000 words
  - If you do not have enough words, then you probably do not have enough content and that will be the main reason for the grade you get
  - If you have too many words and there is no clear reason why you have done so, this may result in a reduction of your total grade (think of 4000 as an upper limit)
- 20% of the project grade



# Project proposal submission

- Submission is on your relevant Project Moodle module
- You need to also submit a project proposal, this must be in word format
- You may submit your proposal in PDF or word format
- Submission dates are at

[https://www.dcs.bbk.ac.uk/intranet/index.php/MSc Student Projects](https://www.dcs.bbk.ac.uk/intranet/index.php/MSc_Student_Projects)

# Project proposal late submission

- If you are late by up to a week, if your grade is 50% or less than nothing happens, otherwise you lose 10% of the grade with a cap at 50%.
- If you are more than one week late but less than two weeks late, then your grade is capped at 50%.

**Please do not plan to submit on the last moment, if you are late even by one second then you need to submit mitigating circumstances via your my Birkbeck. If you need any information about this, then please contact the administrator.**

If you contact a staff member, then the answer is: “please submit mitigating circumstance”.

# Marking and Feedback

- The criteria can be found on the project form, that should be available on your project Moodle Module.
- Your proposal and project are marked by your supervisor, a second marker and possibly an external marker.
- The identity of the second marker is not provided (please refrain from asking for it)
- The marks and feedback take a while since they need to go through the exam board. This should not stop you from starting to work on your project. Your supervisor may provide you at least with part of the feedback.
- The administrators know best when the feedback will be available

# Title page

## Must Contain

- The title of your project
- Your name
- MSc **YOUR PROGRAMME** project report, Department of Computer Science and Information Systems, Birkbeck College, University of London, YEAR
- This report is substantially the result of my own work, expressed in my own words, except where explicitly indicated in the text. I have read and understood the sections on plagiarism in the Programme Handbook and the College web site. I give my permission for it to be submitted to the JISC Plagiarism Detection Service.
- The report may be freely copied and distributed provided the source is explicitly acknowledged.

# Title page example

Shoot-em-up video game

Oded Lachish

MSc **CS** project report

Department of Computer Science and Information Systems,

Birkbeck College, University of London

2021

This report is substantially the result of my own work, expressed in my own words, except where explicitly indicated in the text. I have read and understood the sections on plagiarism in the Programme Handbook and the College web site. I give my permission for it to be submitted to the JISC Plagiarism Detection Service.

The report may be freely copied and distributed provided the source is explicitly acknowledged.

# Project Proposal Advice

# Where to start?

You need a good structure!

You need a good plan for what you are going to write!

# Suggest initial structure for proposal

- Abstract
  1. A brief description of the topic and where it fits into the field
  2. Literature Review
    - Relevant applications
    - Related data science results
    - And anything else relevant
  3. A high level description of the proposed project.
    - Main requirements/features and the process for obtaining them
    - May include:
      - Sketch of a GUI
      - Algorithms you plan to use
      - The practical problem you would like to solve
  4. High level system/software architecture/ data analysis plan
  5. Tools and programming languages
  6. Verification plan
  7. Methodology and work plan
  8. What are your overall targets in term of the project? What do you personally plan to achieve from this project?

You can and should adjust this structure to your needs



# Abstract

Short high level summary of the proposal.

- Do not get technical here, unless you really have to
- This is not the place to discuss the things like the tools you are going to use unless the is something special
- Do not be too generic
- Best to write this after you finished everything else

# A brief description of the topic and where it fits into the field

- Top down presentation.
- Start with the general area of your project and finish and zoom in until you have a very short description of your project.
- It is a good idea to start with 1 or 2 lines very high level explanation of your project. No more than that.
- Your starting point can be very generic however,
  - If you focus too much on general background that is not directly relevant, then you will get low marks regardless of how well this is written

# A brief description of the topic and where it fits into the field

Example:

First sentence

- “The goal of my project is to develop a two dimensional shoot-em-up game”.

Afterwards:

(4-5 lines) The first video game 1950s

(1-2 paragraphs) More on two dimensional video games

(1-2 paragraphs) Shoot-em-up games

(2 lines) the game you want to develop

A page more or less should be enough.

(the exact number of words depends on the contents, there does not exist a one size fit all number)

# High level system/software architecture/ data analysis plan

- Make sure that you know what these are.
- Examples of these can be found on google easily

# Tools and programming languages

- Write in a bottom up manner

What is the tool you chose?

Why you chose it?

Why you did not choose something else?

This is not the place to elaborate too much. Ideally you will not write much more than one paragraph for each tool/language.

Try to write in context and refrain from generic information that is not directly related (like the history of Python)

# Verification plan

How are you going to verify you project works

- TDD
- Specific tools
- Manual tests

# Methodology and work plan

- It should not be too generic (develop code by, testing) provide some specific details like implementing specific features

You should have a timeline with dates!

- We are aware that you will probably not stick to them

What are your overall targets in term of the project?  
What do you personally plan to achieve from this project?

Examples for “What are your overall targets in terms of the project?”

- Produce a well verified application
- Write code for a sophisticated algorithm
- Etc.

Examples for “What do you personally plan to achieve from this project?”

- Gaining experience in Prolog, systematic code verification
- Building confidence in programming
- Improve time management skills



# Working on the Project Proposal

# Working on the project proposal

1. Choose a topic as soon as possible
  2. Start working on the structure of the proposal
  3. Once you have a basic structure start elaborating
- If you feel you need more content, add different ways of analysing your data and creating interesting charts.

# Working on the project proposal, advice

- Do not leave this until the last moment and then do one long sprint!
  - Unless you are very experienced in this, the fact that you did this will be obvious from the writing.
- Do not use the stream of consciousness technique! This results in text that is not cohesive or structured and is very hard to follow.
- Do not use generic sentences that (may sound good), but can be copy pasted to other projects by changing up to one or two words

Example:

- “The goal of this **briefing** is to support the students”
- “The goal of this **class** is to support the students”
- “The goal of this **software** is to support the students”

# Working on the project proposal, advice

**Forget about word count until you know exactly what needs to be in the proposal!**

- Writing a lot of text just to feel you have done work may have side effects:
  - you may feel that you have done significant work when you did not (the work was low quality)
  - You may have problems removing this work if it is not relevant
  - You might keep it despite the fact that it is not good/relevant and requires significant maintenance
  - You might neglect important parts of your document

# Working on project proposal

- At this stage you are a student.

This means that you cannot get away by just using unexplained professional jargon.

In general, you need to explain any technical issue, your goal is to demonstrate that you know what you are writing about.

# Working on project proposal

- Try to update you supervisor on agreed times.
  - If possible, do not do a lot of work before updating your supervisor about this
- When contacting your supervisor be concise!
- It is alright to remind the supervisor that you send an e-mail after **3** working days (staff members get a lot of e-mails and sometimes may miss an important one)
- Try to dedicate a few hours every week for the proposal
- Do not do any writing marathons unless you really have to