Scenario A: a pro-capital punishment US newspaper reporting on the milestone of the 500th execution (pretend it is 2013)

1. Reasons

First, we must identify the objective and source of the visualisation. Scenario A deals with a pro-capital punishment US newspaper reporting on the milestone of the 500th execution. Given that the visualisation (newspaper) supports capital punishment, we can assume that the stakeholder including editors, sponsors, and publishers of the newspaper will also support capital punishment. Therefore, the newspaper article is likely to highlight on positive impacts brought to the society by the implementation of capital punishment (i.e. reduction in crime rates, evidences of capital punishment curbing criminal behaviour and promoting safety), and the severity of past offenses of the criminals. At the same time, the article should consist of a historical overview of crime punishment at the Texas Department of Criminal Justice but exclude any information that would generate anti-capital punishment sentiments (i.e. last statements of criminals). Also, there will be certain lexical choices, structures, and formats required by the publisher of the newspaper.

Some of the stakeholder (editors, sponsors, publishers) intrigues are

- What are the social impacts brought by the implementation of capital punishment?
- Did crime rates decrease in a continuous pattern after the implementation of capital punishment?
- Did the implementation of capital punishment discourage criminals from committing crimes?
- Did the implementation of capital punishment provide or promote safety at both local and national levels?
- What were some of the most notable incidents? Are they interesting enough to be included in the article?
- Does the article follow the newspaper agency's structure, stylistic language, and format?
- Will the article and questions sufficiently appeal to the group of potential audience?

Second, we can determine some of the characteristics and curiosities associated with the potential audience group, when considering the nature and medium of the visualisation: a pro-capital punishment US newspaper. Audiences can choose different kinds of newspapers based on individual socio-political stances or orientations. This means that the potential audience of a pro-capital punishment US newspaper may also support capital punishment (although this may not always be the case).

Some of the audience and potential intrigues are

Basic information about the 500th execution: date, offender, offense committed:

- When is the 500th execution?
- Who is the offender?
- What offense did he/she commit?
- How severe is his/her offense in relative to other criminals?
- Does the offender have previous records of crime or prison?

More general questions:

- When was capital punishment implemented? When was the first execution?
- Does capital punishment discourage crimes and thereby provide us safer environments?
- Did crime rates decrease after the implementation?
- What were some of the most severe crimes?

- Are there any commonality or interesting correlation among criminals (e.g. mental issues)?
- Are there any significant socio-political movements either for or against capital punishment?
- What is the total number of victims?
- How many more victims would there have been without crime punishment?

2. Circumstances

Audience Who is the target audience group?	- We must recognise who the audience group is. Depending on the audience, the type of information we provide, the level of emotional provocation, and the sophistication of language should be adjusted. - In Scenario A, the potential audience group is likely to support capital punishment, since they can choose which newspaper to subscribe based on individual socio-political orientations (although this may not always be the case in companies and schools). The audience group will be interested in general information about the 500th execution and its milestone. They are likely to have had at least secondary educations, capable to read and understand newspaper articles. Yet, the sophistication of language structure should be grounded to exclude any field-specific knowledge and diction.
Creators Teams	- In Scenario A, different skills are required to complete and publish the article. Some of them are data collection, data analysis, data visualisation, design and journalism. Therefore, we need team members who are experts in different skills. In this scenario, we will assume all members are equipped with relevant skills to complete the task. For external helps, the team can receive any supports from other experts.
Format Website, print, mobile?	- We must consider the format in which the newspaper article will be published. Depending on whether the format is in print, digital, website, video, or other possible forms, the article will be presented in different arrangements of texts, items, and graphical representations. This is to effectively present information to the audience. Also, prints cannot deliver any video or 3-D visualisation, whereas mobile and website can. - In Scenario A, the format of the article will be considered as a print. Therefore, the scenario will have constraints in structure and format, which restrict spaces available for information and items. Also, no video or 3-D visualisation will be allowed, since prints do not provide this feature.
Frequency One-off	- Scenario A is a one-off account on the milestone of the 500th execution. Therefore, the article should include a thorough information such as a general historical overview, major events, and any socio-political movements related. The article will cover from the first execution to the present, and not require any future data for updates.
Pressures	- We must recognize any on-going socio-political movements with the subject matter (capital punishment).

Socio-political movements or **Time constraints?**	• There could be on-going campaigns or socio-political movements trying to abolish the practice of capital punishment. The potential impacts of socio-political campaigns and movements are substantial to the society and the general public. It is always wise to recognise and consider their objectives before working on sensitive topics such as life and death. • We can further assume that there is a time constraint to complete research, production, and publication (e.g. 3 months).
Resources Availability of resources	• We must consider the availability of resources and information for analysis and visualisation. • In Scenario A, the data on the milestone of the 500th execution will be from the Texas Department of Criminal Justice, which are publicly available. Our analysis and visualisation will heavily depend on this data. Furthermore, a regression analysis on the correlation between crime rates and the implementation of capital punishment might be a challenging task; there are many external factors that influence this correlation.
Rules Requirements about layout, size, style etc.	• Based on news agencies (e.g. New York Times, Dallas Morning News, and Washington Post etc.), different fonts, layouts, and formats will be used. The editor of the article should follow a specific guideline to complete the report and visualisation. • Scenario A does not specify the news agency. It only states that it is a US newspaper. However, the common goal of all news agencies is to deliver articles and information in most efficient and effective layout, size, and style. Given that this is a US newspaper, we can know that the grammar and spelling of the article should be presented in US English. (i.e. visualisation -> visualization, centre -> center). • The colour palette used in the newspaper should be restricted. While the use of various colour hues can present the visualisation more vibrant, it could confuse the audience at the same time. This will not be suitable for printed versions of newspapers.
Setting Subject matter and audience	• Scenario A deals with capital punishment and the data involved typically require a lot of explanation and narration to describe its significance in our society. The visualisation explaining this subject matter should not be very complex but easily digestible. • Therefore, we can assume that the setting is prolonged (capital punishment and its milestone), and the audience group is remote (we need to provide them with enough information and explanation to make them understand the article and visualisation).

Subject Matter Capital Punishment	• For subject matters that are enlightening, editors can add elements of humour in the article and adjust the formality. For subject matters that are more serious and socio-political related, editors should carefully select diction and any items included, and treat the article with a degree of formality that fits the socio-political perspectives. • Scenario A deals with capital punishment, crimes, live and death. Consequently, the article and visualisation should be depicted with a certain level of seriousness. In this regard, the use of diction and placement of pictures and charts should be carefully selected to avoid any unintentional provocations of victims or political parties.
Technology Availability of technical expertise	• We must consider the availability of technical expertise for analysis and visualisation. The availability of technology will influence the accuracy and integrity of the analysis and the quality of article and visualisation presented. • We can assume that we are dealing with a large news agency in Scenario A. This will eliminate any technical difficulties that editors and reporters could face when conducting their analysis and visualisation tasks. E.g. Data analysis and visualisation will require advanced technical expertise in Excel, GUI-based tools, Photoshop, Illustrator, and other programming software.

3. Purpose Map

Experience

In Scenario A, the experience should be **explanatory**. The article is to provide visualised data and information with interesting insights for the audience to digest. Given that the audience group is not particularly sophisticated, designers should produce a work that incorporates enough written information, references, and visual charts, presenting the audience with insights. (E.g. the visualisation should annotate and describe the milestone of the 500th execution, and the historical development from the past).

Tone

The tone should be **feeling**, but close to **reading**. Scenario A typically deals with a pro-capital punishment newspaper, providing a historical overview of the past. The article should consist of an emotional communication between the designer (newspaper) and the audience group. Thus, the visualisation should try to convey the audience with its pro-capital punishment agenda, while avoiding highly sensitive items that would provoke the audience and prevent from discovering insights.

The Milestone of the 500ᵗʰ Capital Punishment Execution

Capital Punishment Saves Lives by Preventing Crimes and Promoting Safety

By Seungchan (Chan) Baik.

Texas (City of relevance). All fonts are mainly in **black** given that this visualisation is a printed US newspaper. Layouts will be considered based on the level of importance and significance of information to depict the milestone of the 500ᵗʰ execution. Graphs do not use red colours to avoid any negative connotations of capital punishment (death etc.).

Historical Overview

Providing a timeline with bullet points of major events with pictures is an efficient way to deliver interesting facts.

- The State of Texas executed the first offender Charles Reynolds on February 8, 1924 First Execution

-

- The most notorious offenders to be executed was Raymond Hamilton… Major Event

- The US Supreme banned capital punishment in 1972 declaring as "cruel and unusual punishment", but the court once again assessed and allowed it in 1974 Interesting Facts

- The death penalty was authorized by 32 states, the Federal Government, and the US Military

- California, Florida, Texas, and Pennsylvania have the largest death row populations.

- As of December 31, 2012, 2,960 offenders were under sentence of death in the United States.

- McCarthy, Kimberly Lagayle, the 500ᵗʰ execution

-

Capital Punishment Promotes Safety by Preventing Crimes
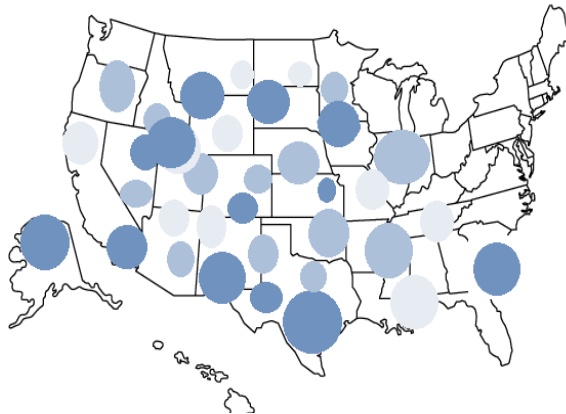

Recent investigations demonstrate a strong link between executions and crime rates.

Safety Rate Comparison at National Level

The left geographic diagram shows states, which implemented capital punishment, have higher safety levels or lower crime rates compared to other states. (The safety level or crime rate should be depicted in circled areas).

1) Colour Saturation differentiates the level/rate 2) Circle is better than filled region as a marker as it can show in-state variations in crime rate/safety level.
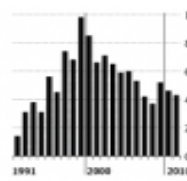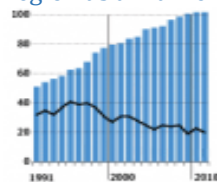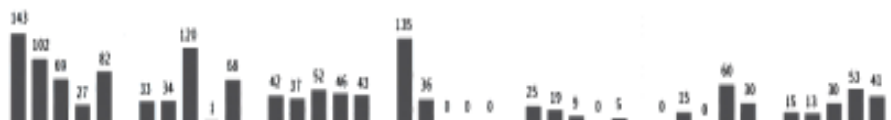

Economist Andy Kirk says that… This section could include charts from studies on the correlation between executions and crime rates or

#### Safety Rate Comparison at Local Level

Changes in crime rates in Texas and another non-implemented state over time.

Types of Crimes Committed by Criminals Executed

This section could include facts on types of crimes committed by the criminals, gender and racial statistics, executions by year, offender no longer on death row, and other death row information from the Texas Department of Criminal Justice. This could be depicted using graphs: pie graphs (e.g. different types of crimes), or histogram (e.g. number of criminals per year, number of crime rates per year), or timeline (change in crime rates. Given that this is a newspaper, it might be better to restrict the number of graphs and tables on this visualisation and write more facts and opinions that the audience can read.

Socio-political Impacts of Capital Punishment
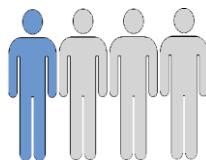
A spokesman from the Texas Department of Criminal Justice remarked that while capital punishment may seem dehumanising, executed criminals actually scored higher in their happiness score when they were awaiting for the sentence. This section could include any infographics that can re-emphasise the pro-capital punishment agenda.

Possible Developments in the Practices or On-going Socio-Political Movements

Alternative way to achieve lower crime rate can be through lawmakers. Lawmakers need to place special emphasis on the moral gravity of offenses in determining the proportionality of punishment.

This section could include alternative ways or developments necessary to reduce crime and murder rates.

Scenario B: analysts at the Texas Department of Criminal Justice staff reporting to senior management at the Texas Department of Criminal Justice

1. Reasons

First, we must identify the objective and source of the visualisation. Scenario B deals with a report that analysts of the Texas Department of Criminal Justice (TDCJ) directs to the senior management. Given that the visualisation is a report written by analysts, we can assume that it will contain a lot of graphs, tables, explanations, and statistical analysis of the department practices. It could be an annual report of executions or the department itself, with certain legal and formatting requirements.

This report could contain information on the management of offenders in state prisons, jails, private correctional facilities in contract with TDCJ, funding, oversight of community supervision, and supervision of offenders released from prison or mandatory supervision (practices listed on TDCJ website and there are more information and resources available).

We can assume that the stakeholder in Scenario B will be the senior management team and staff members.

Some of the stakeholder (senior management team and staff members) intrigues are

- What was the cost associated with the management of offenders in state prisons last year?
- How much funding is received from the community and government annually?
- What is the likelihood of crime commitments of the previously released prisoners?
- What is the average age of the prisoners? Distribute the prisoners into race, offense, country, gender, and sentence years.
- Does the racial categorisation of executed criminals show any interesting facts?
- Did the racial distribution of prison inmates or executed criminals change over time?
- Is our report and its analysis accurate and integral?

In this scenario, the audience group will be the same as the stakeholder (senior management team and staff members); it is specifically stated in the scenario that the report is directed to senior management at the Texas Department of Criminal Justice. The audience intrigues will be the same as the stakeholder intrigues. However, the report may be further directed to other governmental organisations or police.

2. Circumstances

Audience Who is the target audience group?	• In Scenario B, the audience group is the senior management team of the Texas Department of Criminal Justice. There will be certain questions (intrigues) that the members of the senior management want answers to. Also, an in-depth analysis of the department and its practices will be required. The audience group is capable to understand sophisticated information about the department already. Therefore, the aim of the report and visualisation to provide a detailed and sophisticated analysis with a high level of accuracy.
Creators Analysts	• In Scenario B, most of the analysts will be equipped with relevant analytical skills to complete the annual report for the senior management team. There might be additional help needed for data visualisation and design; but it should not

	challenge them, since visualisation and design are not the main tasks of the analysts. We will assume that the analysts will be provide with all relevant skills to complete the task.
Format PowerPoint, documentation, print hand-out?	• In Scenario B, the report could be presented in PowerPoint slides as a presentation to the senior management, a documentation of the annual report, and a print hand-out for general ideas of the report. Each format should be differentiated using different layouts and formatting. This will maximize the delivery of ideas and effective communication. • For the visualisation in this assignment, the print hand-out format will be considered.
Frequency Annual, monthly, one-off?	• In Scenario B, the report could be annual, monthly, or one-time. Based on the time framing, the frequency of the report can be different. • We will assume that the scenario deals with an annual report. Thus, the frequency will also be annual.
Pressures Time constraints	• There must be a set deadline that the managers require analysts to complete the report by. The deadline can be different based on what type of report it is e.g. annual, monthly, or one-time. • We will assume that we have 3 months to complete the task.
Resources Availability of resources	• Scenario B is an internal review of practices offered by the Texas Department of Criminal Justice. The analysts can access to any information needed to complete the task, even some of the confidential ones. • Therefore, the analysts are not constrained by the availability of resources in Scenario B.
Rules Requirements about layout, size, style etc.	• The report must be in consistent with the internal requirements and formatting of the Texas Department of Criminal justice (formality, certain font use, documentation formats and layouts). Also, it is not likely that 3-D visualisations will be included in this report other than videos.
Setting Subject matter and audience	• Scenario B deals with an internal report of the Texas Department of Criminal Justice, and it will contain many field-specific knowledge. The analysts do not have to explain everything in details as the senior management team would have already spent many years working in the field. • Therefore, the setting of the report will be rapid; the managers are interested in many different information, and the report has to be comprehensive, but rapidly digestible.
Subject Matter	• Scenario B is a report of analysts directed to the senior management team. Therefore, the report has to be presented with formal structure and language;

Report or review of TDCJ	words and sentences should be carefully structured to deliver the analysis in a concise, yet detailed style.
Technology Availability of technical expertise	• The report will consist of in-depth analysis. Therefore, the analysts should be proficient with high level data analysis techniques and software. • Yet, they might not be proficient with high level data visualisation or illustration techniques and software such as d3.js or Illustrator.

3. Purpose Map

Experience

In Scenario B, the experience should be both **explanatory** and **exhibitory**. The visualisation will be amalgamate of facts and explanations, incorporating graphs and infographics to display data (exhibitory). Some visualisations could include insights that the senior management team was not aware of. This will require the analysts to present their insights to the senior management team (explanatory).

Tone

The tone should be **reading**. Scenario B deals with a formal report directed from the analysts to the senior management team. There is no necessity for an emotional communication to deliver ideas and information. Also, using an emotional tone will rather hinder the senior management team's process of understanding.
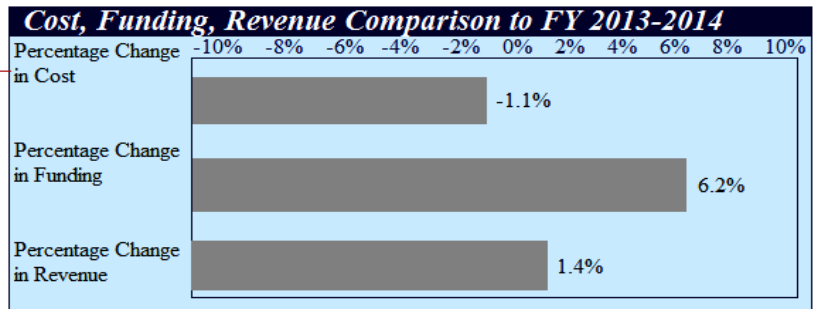
Fast Facts
Main Findings from the Annual Report 2014-2015

Total Amount of Funding Raised in FY 2014-2015 $3,656,887

This is a fast fact page. The most substantial and significant findings from the analysis will be presented. The colours used are the main colours of the TDCJ. The layout and types of graphs will be varied to best describe the information (table, bar graph, piegraph etc.) This page will mainly consist of graphs and some explanations to substantiate them.

Cost, Funding, Revenue Comparison to FY 2013-2014

	Percentage Change
Percentage Change in Cost	-1.1%
Percentage Change in Funding	6.2%
Percentage Change in Revenue	1.4%

Scale: -10% -8% -6% -4% -2% 0% 2% 4% 6% 8% 10%

In the fiscal year of 2014-2015, the Texas Department of Criminal Justice managed to decreasae the overall coast by 1.1%, increase the funding by 6.2%, and increased the overall revenue by 1.4%, compared to the fiscal year of 2013-2014.

Population of Prisoners Compared to past FY (2007-2014)

	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Total Prisoner Population	523,542	553,221	532,123	544,123	546,122	548,322	551,123	550,987
Felony Direct Population	235,211	232,234	233,123	236,343	236,311	235,123	236,221	231,123
Prisoners to be Executied	10	9	5	7	8	9	3	4
Past Prisoners under Community Supervision	842,123	856,123	867,123	887,342	890,123	900,125	912,355	923,123

In the fiscal year of 2014-2015, the Texas Department of Criminal Justice had the total prisoner population of 550,987...

TDCJ operated

1. **63.1** million increase for 1,500 new Substance Abuse Felony Punishment (SAFP) Treatment beds
2. **28.8** million increase for 1,400 new Intermediate Sanction Facility (ISF) beds (shared with parole)
3. **10.0** million increase for Mental Health treatment through Texas Correctional Office on Offenders with Medical or Mental Impairments (TCOOMMI)

This visualisation does not depict the real analysis. Therefore, the figures represented are not accurate, and the information on this visualisation is randonly chosen. None of information on this visualisation represent the real analysis. The visualisation is just to give the general idea.

Effectiveness of Funds and Revocations to TDCJ

Scale: 10,000 to 25,000; Years: 2007 2008 2009 2010 2011 2012 2013 2014 2015

Statewide Locations of Community Service Facilities
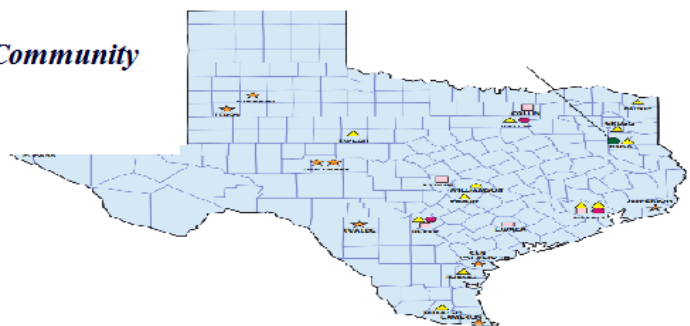
Scenario C: a campaign group looking to influence a debate about the ending of capital punishment

1. Reasons

First, we must identify the objective and source of the visualisation. Scenario C deals with a campaign group, looking to influence a debate about the ending of capital punishment. The campaign group is thus anti-capital punishment, trying to produce a visualisation that would appeal to the audience and gain sympathy of the inmates. In this regard, the visualisation should focus on emotional facts from the data provided by the Texas Department of Criminal Justice. Also, the group will be interested in more factual data such as the cost of conducting an execution and its comparison to other practices.

The stakeholders in this this scenario are the campaign managers who is responsible for the whole project, the sponsors for the campaign, other governmental or organisational groups either for or against this campaign.

Some of the stakeholder intrigues are

- What are the costs associated with capital punishment (financial cost, amount of time in prison, therapeutic cost)?
- Does capital punishment actually discourage criminal activities?
- What are the negative consequences of capital punishment?
- What kinds of emotional and mental hardships did executed criminals face?
- What are the information that can deliver our anti-capital punishment agenda?

The audience in this scenario can be any people who has an access to the campaign.

Some of the audience and potential intrigues are

- Is capital punishment ethically correct?
- How many criminals are executed every year? What is the total number of executed criminals in the past?
- Is capital punishment the only way to treat severe criminals?
- Did crime rates decrease?
- What are the laws and regulations regarding capital punishment?
- Are there any significant socio-political movements either for or against capital punishment?
- Are there any accounts or stories available from the criminals' family members?

2. Circumstances

Audience
Who is the target audience group?)

- In Scenario C, the audience group is the general public. The campaign group has to affect emotion of the general public and potentially lead to an anti-capital punishment movement.
- The audience group is diverse in Scenario C. It could be a high school student or a university professor. Given this potential range, the campaign group should think about the target audience group's ability to comprehend information, and choose an approach that would best appeal to them and affect gain sympathy.

Creators Campaign group	• The members may not be skilled enough to conduct sophisticated data analysis and visualisation. Additional help may be required for the group to successfully finish the campaign (i.e. volunteers to spread the campaign, creative designers to design the campaign visualisations, and analysts to find relevant information for anti-capital punishment sentiments).
Format Print, Website, Documentary, Video	• The campaign can be presented in a diverse range of formats. It could be a print with consequences of capital punishment, a website with animated features, a documentary or video of executed criminals. • In this assignment, we will assume that the visualisation is presented on the campaign group's website.
Frequency Live, one-off?	• The frequency of the campaign depends on the duration/length of the campaign. • When the campaign initially starts, we need a set of historical data to initiate. Then, depending on the duration of the campaign, we will have to update the campaign with more recent data. Thus, the frequency will be both one-off and live.
Pressures Time constraints	• The aim of the campaign is to raise public sentiments over capital punishment and lead to a socio-political change. It is likely that such campaign will be framed with enough time for preparation and organisation (e.g. 1 year).
Resources Availability of resources	• It is likely that the campaign group will be either supported or challenged by pro or anti-capital punishment governments and organisations. The support or challenge that the group faces will consequently affect the availability of resources. • In this assignment, we will produce a visualisation with publicly available information only (e.g. the Texas Department of Criminal Justice).
Rules Requirements about layout, size, style etc.	• The format of the visualisation can be varied. Thus, the rules will depend on the type of formats that the visualisation is presented in. • In this assignment, we will assume that the visualisation is presented on a website. Certain rules will be associated with web visualisations presented on mobile, tablet, desktop, and laptop (size, compatibility). • In terms of rules, Scenario C is more flexible and creative compared to Scenario A and B. Yet, the use of colours and layouts should be carefully selected to deliver the anti-capital punishment sentiment.
Pressures Other governmental and non- governmental organisations	• There will be socio-political movements either for or against capital punishment by other governmental entities or organisations. • In order to present a compelling piece of visualisation, the campaign group must recognise the motivation behind those entities and organisations.
Subject Matter	• Unlike other scenarios, we are provide with a freedom to choose the main subject matter in Scenario C. We will be selecting a subject matter that has most emotional appeals.

The main subject of the campaign	• In this assignment, we will produce a visualisation using the last statements of the executed criminals. • The main goal of a campaign is to influence the audience by presenting a captivating and emotionally appealing work. Thus, the use of animation, insertion of information, and colours should be carefully considered.
Technology Availability of technical expertise	• The campaign group might be challenged by technical difficulties in data analysis and visualisation. However the group is likely to pay for or be supported with advanced programming, animation, and visualisation skills by other groups. • Therefore, the availability of technical expertise will not heavily affect the progress of the campaign.

3. Purpose Map

Experience

The experience will be both **exploratory** and **exhibitory**. The visualisation will mainly be exploratory to let the audience explore and discover insights. This is an effective experience to leave a long lasting impression. However, we must consider the level of user interfaces and experiences of the visualisation format allows.

The visualisation will also be exhibitory. Some background information of capital punishment should be presented for the audience in order to deliver the anti-capital punishment agenda.

Tone

The tone should be **feeling**. Scenario C deals with a campaign that has to provoke the audience group and instil anti-capital punishment sentiments. Although some information are better presented in the reading tone such as figures and tables about prisoners and executed criminals, the main tone of the campaign should be feeling so we can create a long lasting, emotional impact on the audience group.

4. Visualisation Idea

"Last Statements of Executed Criminals" an interactive web visualisation with animated features

LAST HEART LOVE LIVE DIE
BETTER PLACE SORRY FAMILY SON DAD
THANK SORRY YOU HATE PAIN PEACE
MISS REGRET
FRIENDS ME HOME LAST MOM END
ALWAYS HELL LIFE NONE ULTIMATE
NOBODY JESUS CHURCH CRIST BABE BABY
KILL ALIVE HARM STOLE LORD FORGIVE
AFRAID
PLEASE PRAY
TODAY RESPECT VAIN TRUTH
HURT EMOTION JUDGING SCARED

DANIEL LOPEZ

"I would like to thank you...
This was never meant to be,
sure beyond my power.
I can only walk the path before
me and make the best of it.

I am sorry for putting y'all
through this.

I am sorry, I love you. I
am ready.

May we all go to Heaven..."

First Page

- This is an interactive web visualisation with animated features. The first page shows word cloud/wordle from a textual analysis of the executed criminals' last statements.
- Using a textual analysis, we are collecting nouns used to describe last statements. The relative magnitude (size) of the words represent the number of times that the specific word was used in last statements. (e.g. 'Love' was used more than 'Live')
- The magnitude is also represented by colours. The words used more are in darker red colours, and the words used less are in fading pink, white, and grey. This variation in red colours is to create a connotation for love, blood, sacrifice, and the importance of life.

Second Page

- When we move the mouse cursor over each word, we will see the actual number of times that the word was used in last statements.

SCARED was used 321 times by the executed criminals to deliver their last words...

ING SCARED

- Clicking on a word will lead to the second page where the audience can see the actual photos of executed criminals who used the word to describe their last statements.
- Photos are presented in black and white with adjusted brightness and contrast to increase the sympathetic appeal and deliver anti-capital punishment sentiments.

Third Page

- Clicking on a photo will lead to the last statement of the executed criminal as the right diagram shows. The background is selected to be a colour similar to red to deliver the connotation of sacrifice, blood, and life. It is, however, toned down so the diagram does not become overly-sentimental to a degree where it in fact prevents the audience engagement.
- Again, words that frequently appeared in last statements are created with larger fonts. This is to give more significance to those noun (e.g. thank, sorry, love, and heaven).

Scenario D: what potentially intrigues you about this data? What might you undertake if you had the chance?

1. Reasons

Scenario D asks my potential interest about the data and what I would undertake given the chance. In order to identify the objective and source of the visualisation, I went thought death row facts and information provided by the Texas Department of Criminal Justice (http://www.tdcj.state.tx.us/death_row/dr_facts.html).

I have found that most of the executed criminals in the Texas Department of Criminal Justice had low education levels (highest grade completed). From this, my assumption is that there could be a correlation between education and crime rate.

There will be no formal or academic requirement for Scenario D. The setting for the scenario will be a simple blog entry for personal findings from the regression analysis on the correlation between education and crime rate, using the data from the Texas Department of Criminal Justice.

Scenario D specifically asks, "What potentially intrigues you about this data?" Therefore, the curiosity in this task is primarily personal. We can assume that there is no stakeholder in Scenario D; no one is giving you tasks to complete. Thus, there is no stakeholder intrigue.

Some of the personal intrigues under the setting described above are

- Is there any correlation between executed criminals and their education levels?
- Is there any correlation between prison inmates and their education levels?
- Is there any correlation between crime rates and education?
- Can I detect any outliers from above regression analysis?
- Can I apply above questions to the nationwide data provided by the Bureau of Justice Statistics?
- Do executed criminals and prison inmates show different results? (E.g. A relative comparison between the two groups of executed criminals and prison inmates at both local and national levels).

In this scenario, we will consider that the blog entry is only saved or published for personal benefits. We do not have to consider audience intrigues, and these intrigues will be covered as personal intrigues. However, if the blog entry is published in a blog online, then there will be potential audiences (blog visitors).

In this regard, there could be audience and potential intrigues of

- It might be interesting to find psychological or causal effects of education on crime rate.
- Are there any studies or researches substantiating this belief?
- If so, what type of education will mitigate crime generation in our society?

2. Circumstances

| Audience
Who is the target audience group? | • Scenario D serves for personal intrigues about the data from the Texas Department of Criminal Justice. This consequently means that the task can be completed without considering any audience groups.

• However, if the report and visualisation are presented online in blog or personal website, the target audience group will be anyone who visit the blog or website. |

	The audience can be someone who already has a substantial amount of understanding about crime punishment or someone who has no knowledge at all.
Creator Me	• The creator of the report and visualisation is just me. The level of data analysis and visualisation executed in this scenario will be limited to my personal academic skills. • I have completed this task based on the fact that I will not seek for any external helps for improvements.
Format Personal choice	• The format in Scenario D can be anything based on the personal preference. There are no requirement or guideline to follow. • However, we will assume that the report and visualisation will be published as a blog entry. The format will include graphs, explanations, and images to explain the analysis and personal impression. We can present any diagrams, visualisations, or graphs compatible to the online service provider of the blog.
Frequency One-off	• This report and visualisation will be one-off task, using only historical data sets. There will be no need to update the analysis.
Pressures Time constraints	• This scenario does not bind to any time constraints. Tasks can be completed in a flexible manner.
Resources Availability of resources	• Given that this is a personal task, there will be limitations in the availability of resources. • I will mainly use dataset from the Texas Department of Criminal Justice and the Bureau of Justice Statistics. For other references, I will search necessary data and graph using scholastic articles and journals.
Rules Requirements about layout, size, style etc.	• There are no formal or academic guideline to follow and the task can be completed in personally preferred rules. • I would like to produce a work with a simple structure and muted tone of colours, which are compatible with my blog.
Pressures Financial constraints, motivation	• This is a personal task, so no formal institution is backing up the research and analysis. It is likely that there will be financial constraints for in-depth analysis. • Also, the task is conducted due to personal motivation and commitment. The level of motivation and interest will affect the quality of analysis, report, and visualisation presented.
Subject Matter	• The visualisation is a personal blog entry about the analysis on the correlation between education and crime rate. We do not have to present the final result in

A blog entry about an analysis of Education and Crime Rate	a formal and organisational setting, since this is a personally motivated task. This allows more degrees of freedom. • However, the subject matter that we are typically dealing with in this scenario is the correlation between education and crime rate. Therefore, the style and presentation of the blog entry should be academic to some extent.
Technology Availability of technical expertise	• I will be conducting the analysis using pre-installed software of R, Microsoft Excel, and Tableau. In this regard, the availability of technical expertise will be limited compared to other scenarios.

3. Purpose Map

Experience

The experience in Scenario D will be **explanatory**. The report and visualisation will present and describe the main finding from a personal analysis on the data from the Texas Department of Criminal Justice and the Bureau of Justice Statistics.

Tone

The tone in Scenario D will be **reading**. There is no particular target audience group. The blog entry is to serve as a personal journal or record. Therefore, the written composition and visualisation (charts and picture) can be simple, with no requirement for emotional delivery.

4. Visualisation Idea e.g. blog entry

CAN EDUCATION BRING US SAFER SOCEITY?

February 1st, 2016

(Introduction) One of the hottest public policy agenda in our society is crime reduction. While completing the assignment for Data Visualisation, I wondered whether education policies can be implemented to reduce crime rate… Well, of course… Notice that the writing style is informal

(Addition of a relevant picture or cartoon)

Notice that the layout is not particularly structured compared to other scenarios.

How can we know whether there is a correlation between education and crime rate? First, I examined the education level from the prison inmates and executed criminals. A regression analysis on… shows that A lot of explanations (writing) and graphs will be used to deliver the findings from the analysis.

Notice the use of contrast in colour (colour hues) to compare education levels among general population and criminals. Also, the graph is more roughly presented (e.g. the absence of title), since this is a personal task. The graph is also very simple; the aim is to just deliver main points.

(Explanation) Above graph compares the education level of inmates obtained from the Texas Department of Criminal Justice and general population. This shows that…

We can include more graphs (bar charts, timeline, scatter plot), and use data at both local (Texas) and national (US) levels to establish the correlation between Education and Crime Rate. We could further reference some scholastic report or news articles. Furthermore, we can look into education policies and suggest which will be most effective in reducing crime rates, thus provide public safety.