Analysis report:

SAT CRITERION 3



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**Research question:** The greatest basketball player of all time has generally been a topic argued amongst NBA fans, who is considered the greatest basketball player of all time based on a comprehensive analysis of their achievements, skills, impact on the game, and contributions to the sport of basketball?

**Requirements, Constraints and Scope**

**Functional requirements:**

* **Must include data which is presented in a meaningful way.**
* **The infographic includes multiple graphs that are interactable.**
* **Educates the audience about the greatest basketball player/s.**
* **The solution must help reach the conclusion to the research question.**

**Non-functional requirements:**

* **All data used is over the span of 50 years (1970 – 2024)**
* **The solution includes precise information, diagrams, graphs, images, and graphics related to the subject matter.**
* **Infographic incorporates colours to contrast the solution.**
* **Appropriate conventions are incorporated into all data visualisations, and they must be thorough plus meaningful.**
* **The infographic should be designed to be accessible to users with disabilities.**
* **Visual styles across the infographic should be consistent.**

**Data requirements:**

* Official NBA statistics and records, NBA top 75 list **(1970 – 2024)**
* Biographies and documentaries about the players
* Post-game Interviews with basketball experts, coaches, and teammates.
* Articles from reputable sports journalists and analysts
* Informative videos upon basketball players performance and rankings
* Surveys given to basketball fans to determine an overall general opinion.

**Constraints:**

**Economic:**

* The solution must be completed by late August.
* Only include data from 1970 – 2024.
* Time must be allocated to collect data.
* No budget assigned to the project so all data must be sourced from free sources.
* Find 100 participants that watch the NBA and have a basic knowledge of players.

**Technical:**

* All the data and datasets must be processed through Microsoft Excel or Airtable.
* Infographic is created on school laptop.
* Have not created an interactive infographic before so new skills and programs must be learnt.
* **Data exported from other sources or software can be easily imported into Microsoft Excel or** Airtable**.**

**Legal:**

* All secondary sources must be referenced to avoid Legal issues.

**Usability:**

* The solution must be able to easily be interpreted by the user.
* **Infographic is responsive across different devices and screen sizes.**

**Social:**

* Secondary sources are gathered from trustworthy and free online sources.

**Requirements, Constraints and Scope**

**Scope:**

The infographic will present data based upon the research question through a comprehensive analysis presented in a simplified and meaningful way. The infographic will present data based upon the research question through a comprehensive analysis presented in a simplified and meaningful way. It will be designed to support or refute the research question conclusively, providing a valid and substantiated conclusion. Utilising data preferably from 1970 – 2024, drawing from official NBA statistics and records, biographies, documentaries, post-game interviews, articles, videos, and surveys, the content will provide comprehensive insights into the players' performances and achievements over the years. The infographic will incorporate relevant colours and fonts to enhance visual appeal and aesthetics, and allow for it to be read easily by different people.

The solution will mainly be based on an American and Australian perspective of basketball players but incorporate American data through secondary sources. This is due to the fact it is hard to gather any statistical data from Australian sources as there is no NBA in Australia. All secondary data will be accurately referenced to mitigate any potential legal complications. As an infographic has not been developed before new skills and programs will be obtained to ensure the solution's ease of interpretation and the responsiveness of the infographic on different devices. The SAT solution will be completed by late August, meaning that it has limited time, and this means that not all aspects of the infographic can be produced to the highest level nor can it go over every single basketball player and their accolades.

**Critical and creative thinking evidence page:**

**Functional requirements:**

* **Must include data which is presented in a meaningful way:**
  + Will the audience be able to interpret the data in a meaningful way with ease?
    - Ask five people if the data is easy to interpret.
    - Ask three different people of different ages to look at the infographic an for them to create a short summary of their interpretations.
    - Ensure that data which is presented is in meaningful graphs and easy to read.
* **The infographic includes multiple graphs that are interactable:**
  + Does the solution include different graphs which are interactable?
    - Check in the solution if there is multiple graphs incorporated.
    - Check data to ensure datasets can be presented in a graph form.
    - Incorporate dynamic graphs which can be interactable e.g: checkboxes.
* **Educates the audience about the greatest basketball player/s.**
  + What key details should be included to educate the audience effectively?
    - Including details and information which isn’t commonly known to the audience.
    - Include advanced basketball statistics and explain them to the audience.
    - **Provide a detailed account of the player's career highlights, including significant achievements, milestones, and accolades.**
  + **How will this be measured?**
    - **Ask 5 different people to look at the infographic**

1. **Ask each person if they learnt something new about a player that changed their minds on the current basketball player debate.**

* **The solution must help reach the conclusion to the research question**
  + **How would data be shown to reach the conclusion of the research question?**
    - **Through the use of statistics, graphs, data from 1970 – 2024, career accolades and an overall statement.**
    - **Data will then be used in graphs with high quality and ease of understanding material.**
  + **Does the initial data answer the research question?**
    - **The data given will give a definitive answer to the greatest basketball player of all time.**

**Non-functional requirements:**

* **All data used is over the span of 50 years (1970 – 2024)**
  + **Is the data that is used between 1970 – 2024?**
    - **Record dates of sources used**
    - **Try and look at latest data as they could have been changed from 1970.**
* **The solution includes precise information, diagrams, graphs, images, and graphics related to the subject matter.**
  + **Is the data that is presented all accurate?**
    - **Double check if data that is used is accurate to the original data.**
    - **Check if data sources are reputable.**
  + **Is data presented relevant to the research question?**
    - **Check if data is based upon basketball player/s, teams and more.**
    - **Read headings of data sources to ensure data is relevant.**
* **Infographic incorporates colours to contrast the solution.**
  + **Does the infographic include colours?**
    - **Check if the infographic has colours**
    - **Ask 3 different aged people to view the infographic and rate the ability to read information with the incorporated colours.**
    - **If colours don’t contrast remove them.**
* **Appropriate conventions are incorporated into all data visualisations, and they must be thorough plus meaningful.**
  + **Do the data visualisations follow meaningful conventions?** 
    - **Check the chart elements to see relevant conventions are incorporated.**
    - **Ask 3 people to read the data visualisations and determine whether they are able to read the data thoroughly.**
* **The infographic should be designed to be accessible to users with disabilities.**
  + **Is the infographic designed for it to be accessible and readable to users with disabilities?** 
    - **Include alternative text for all images and graphics.**
    - **Prioritise clarity and simplicity in design.**
    - **Ask three people with impaired vision to read the infographic and give feedback to whether they are able to access the infographic easily and be able to read it.**
* **Visual styles across the infographic should be consistent.** 
  + **Does the infographic have a consistent visual style?**
    - **Ensure that each font, image and text sizes are all consistent.**
    - **Confirm that images are of similar style and quality, and that they complement the overall design theme.**

**Data requirements:**

* Official NBA statistics and records, NBA top 75 list **(1970 – 2024)**
  + Where will this data be collected from?
    - Official NBA sources such as the NBA site itself
    - Credible online sources which gather obscure statistic outside of the norm.
* Biographies and documentaries about the players
  + Where will this information be gathered from?
    - Official licensed NBA player documentaries from media outlets.
    - Autobiographies from NBA players.
* Post-game Interviews with basketball experts, coaches, and teammates.
  + Where will this data be collected from
    - Reputable Social media channels (TV networks, Online streaming services.)
    - Reputable Sports news websites.
    - Transcripts of post-game interviews on online video platform such as YouTube.
* Articles from reputable sports journalists and analysts
  + Where will this data come from?
    - Established sports media outlets (ESPN, Sports Illustrated, Bleacher Report, The Athletic, team-specific websites)
* Informative videos upon basketball players performance and rankings
  + Where will this data come from?
    - YouTube channels of sports analysts, media outlets, content creators
    - Sports media platforms.
  + How will this be measured?
    - Reputation of the channel or content creator
    - Accuracy of information presented
    - Consistency with other credible sources
* Surveys given to basketball fans to determine an overall general opinion.
  + Who will I collect this information from?
    - **Basketball fans across the globe through the use of social media polls.**
    - **Online survey platforms.**
    - **Fan forums.**
    - **Previous surveys which have been given out with a verdict.**
    - **Surveys given to NBA players.**

**Steph curry graphic reference:** *Steph Curry Poster Design by skythlee on DeviantArt*. (2016, March 28). [Www.deviantart.com](http://Www.deviantart.com). <https://www.deviantart.com/skythlee/art/Steph-Curry-Poster-Design-599411351>

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