

GROUP 13



PEAK PERFORMANCE PARTNERS



TRANSFORMING TEAMS TO TRIUMPH

12/06/2023



MEET OUR TEAM



AMOGHVARSH
KULKARNI



VEDANT
KAMAT



SAI THANMAYI
KARPURAPU



DEVNI
SHAH

CONTENTS

01

BACKGROUND

Users

Data/Source

02

INTRODUCTION

Mission statement and
Mission objectives

03

DATABASE DESIGN

Conceptual, logical and
physical database design

04

USE CASES

Using SQL and
Tableau results

05

INSIGHTS



01
BACKGROUND

CLIENT

Our client is University of Maryland women's softball team, who have approached us to provide valuable insights and recommendations to help improve their game play for the 2024 season.





DATA/SOURCE

SOURCE:

<https://umterps.com/sports/softball/schedule>

TIME PERIOD:
2000-2023

DATA INCLUDES:

The date and day when University of Maryland's softball team competed against an opponent at a location and match's result.



USERS

- Softball Team (Players, Coaches)
- Athletic Directors and Administrators
- University Administration
- Fans and Alumni



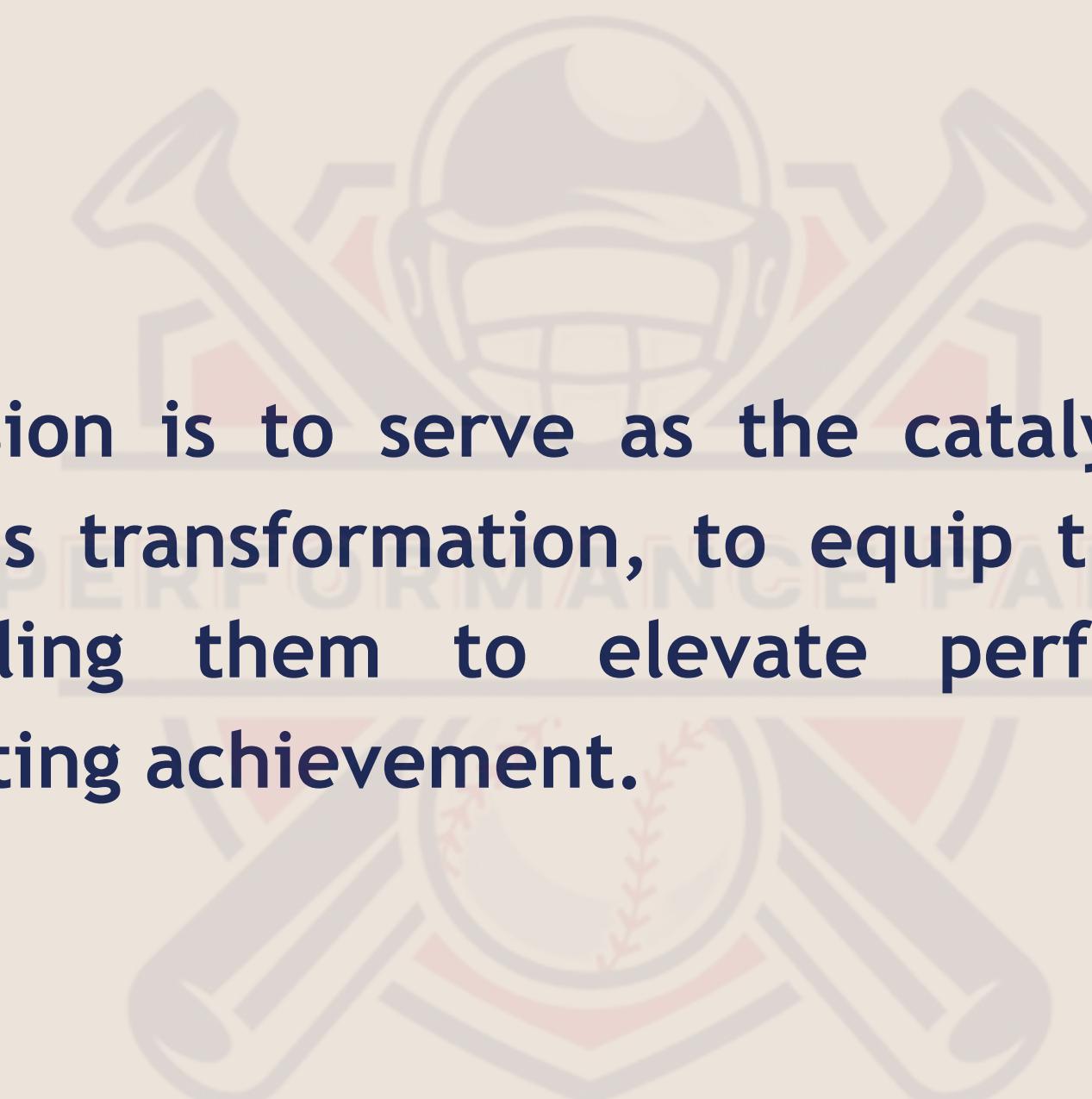


02

INTRODUCTION



MISSION STATEMENT

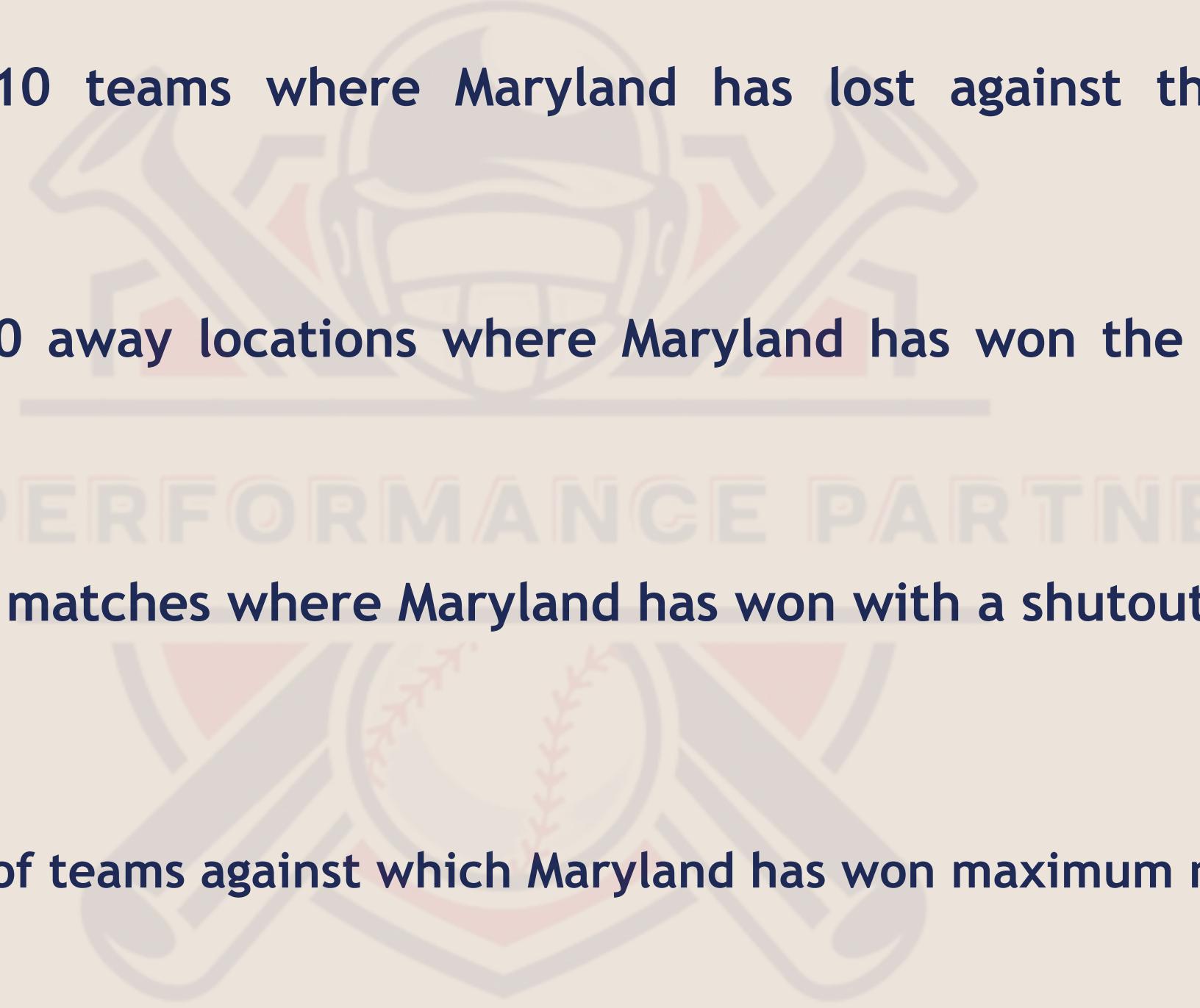


As consultants, our mission is to serve as the catalyst for the University of Maryland's softball team's transformation, to equip the team with actionable recommendations, enabling them to elevate performance standards and establish a legacy of sporting achievement.

TRANSFORMING TEAMS TO TRIUMPH



MISSION OBJECTIVES

- 
- 01** Analyse the top 10 teams where Maryland has lost against the maximum number of times
 - 02** Analyse the top 10 away locations where Maryland has won the most number of times.
 - 03** Analyse the top 10 matches where Maryland has won with a shutout.
 - 04** Analyse the top 10 of teams against which Maryland has won maximum number of times.
 - 05** Analyse the top 10 teams against whom Maryland has won by the highest margin.

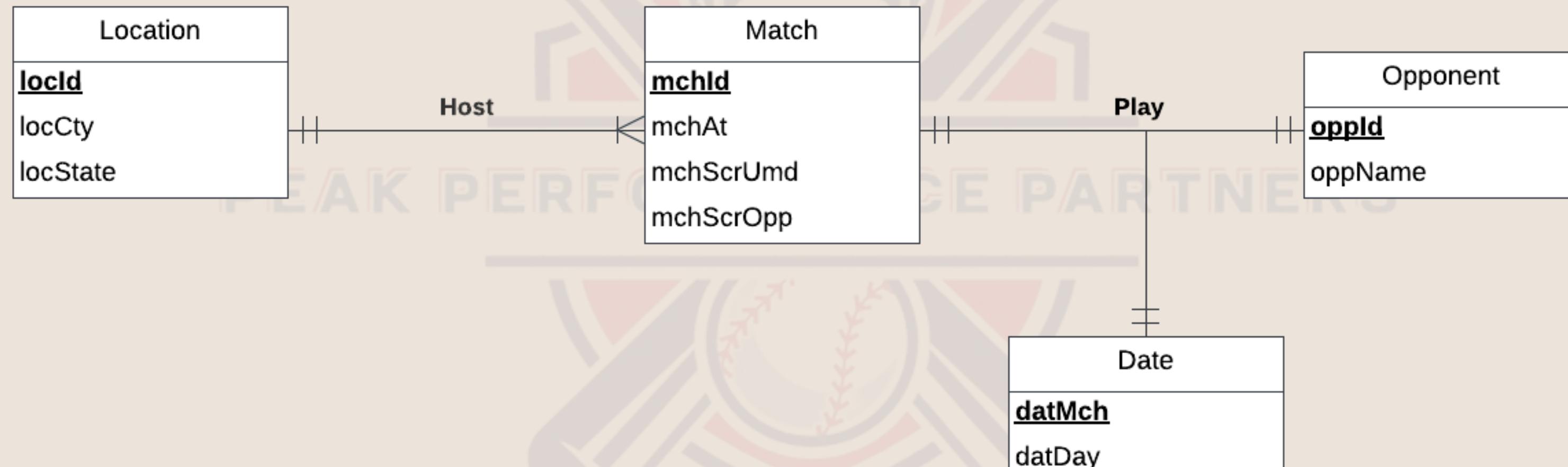


03

DATABASE DESIGN



ER DIAGRAM



PeakPerformance
Partners

TRANSFORMING TEAMS TO TRIUMPH

RELATIONAL SCHEMAS

Match (mchId ,mchAt, mchScrUmd, mchScrOpp,*locId*)

Date (datMch , datDay)

Location (locId , locCty ,locState)

Opponent (oppId , oppName)

Play (mchId , datMch , oppId)

SQL CREATE TABLE: PLAY

```
CREATE TABLE [PPP.Play] (
    mchId CHAR(10) NOT NULL,
    datMch DATE NOT NULL,
    oppId CHAR(5) NOT NULL
CONSTRAINT pk_Play_mchId_datMch_oppId PRIMARY KEY (mchId,datMch,oppId),
CONSTRAINT fk_Play_mchId FOREIGN KEY (mchId)
    REFERENCES [PPP.Match] (mchId)
    ON DELETE CASCADE ON UPDATE CASCADE,
CONSTRAINT fk_Play_datMch FOREIGN KEY (datMch)
    REFERENCES [PPP.Date] (datMch)
    ON DELETE CASCADE ON UPDATE CASCADE,
CONSTRAINT fk_Play_oppId FOREIGN KEY (oppId)
    REFERENCES [PPP.Opponent] (oppId)
    ON DELETE CASCADE ON UPDATE CASCADE)
```



04 USE CASES

BASEBALL BUSINESS TRANSACTION 1

What are the details of the top 10 teams which Maryland has won against keeping a Shutout?

```
SELECT TOP 10 (p.oppId) , o.oppName AS 'Opponent Name',
COUNT(m.mchId) AS 'Number of Shutouts'
FROM [PPP.Match] m, [PPP.Opponent] o, [PPP.Play] p
WHERE p.oppId=o.oppId
AND m.mchScrOpp=0
AND m.mchId=p.mchId
AND m.mchScrUmd>m.mchScrOpp
GROUP BY p.oppId, o.oppName
ORDER BY 'Number of Shutouts' DESC
```

	oppId	Opponent Name	Number of Shutouts
1	op174	George Washington	8
2	op175	Georgetown	7
3	op84	Virginia	7
4	op12	Delaware State	6
5	op126	James Madison	6
6	op144	Howard	6
7	op191	Maryland Estn Shore	6
8	op62	Towson	6
9	op67	George Mason	5
10	op09	Boston College	4

What are the details of the top 10 teams which Maryland has won against keeping a Shutout?

op174 8 George Washington	op12 6 Delaware State	op191 6 Maryland Estn Shore	op62 6 Towson
op175 7 Georgetown	op126 6 James Madison		
op84 7 Virginia	op144 6 Howard	op67 5 George Mason	
		op09 4 Boston College	

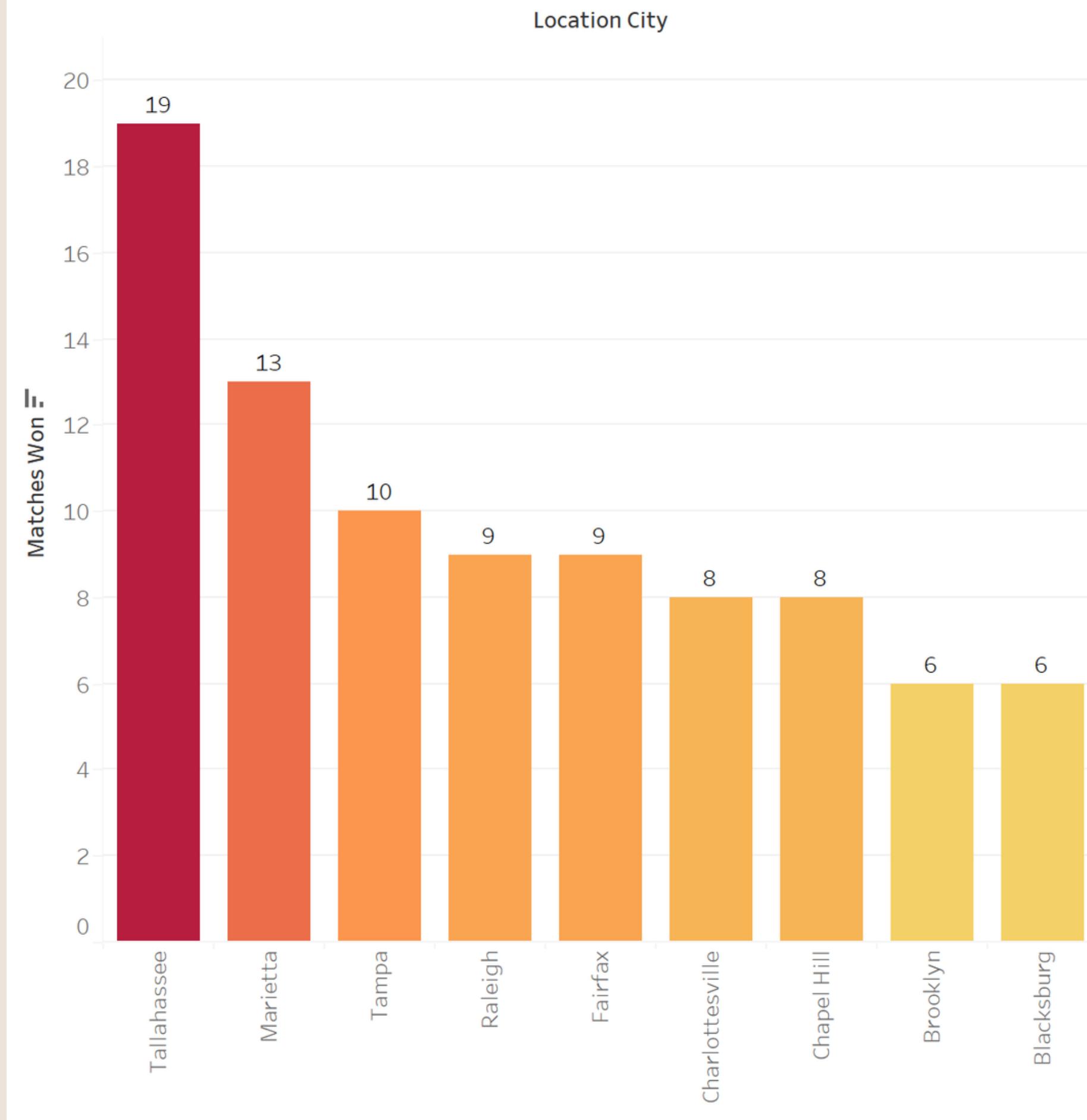
BUSINESS TRANSACTION 2

What are the details top 10 away locations where Maryland has won the most number of times?

```
SELECT TOP 10 (l.locId), l.locCty,  
COUNT (CASE WHEN m.mchScrUmd > m.mchScrOpp THEN 1 END)  
AS 'Match Won'  
FROM [PPP.Match] m, [PPP.Location] l  
WHERE l.locId=m.locId  
AND mchAt='Away'  
GROUP BY l.locCty, l.locId  
ORDER BY 'Match Won' DESC
```

	locId	locCty	Match Won
1	lo005	Tallahassee	19
2	lo001	Marietta	13
3	lo018	Tampa	10
4	lo013	Raleigh	9
5	lo006	Fairfax	9
6	lo010	Chapel Hill	8
7	lo017	Charlottesville	8
8	lo029	Boca Raton	7
9	lo024	Brooklyn	6
10	lo028	Blacksburg	6

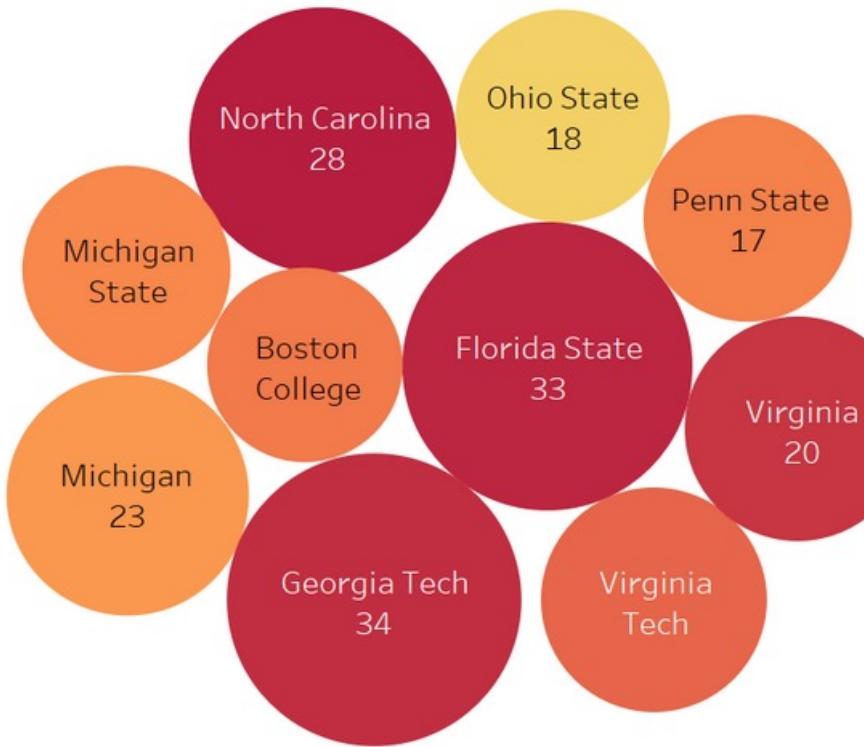
What are the details top 10 away locations where Maryland has won the most number of times?



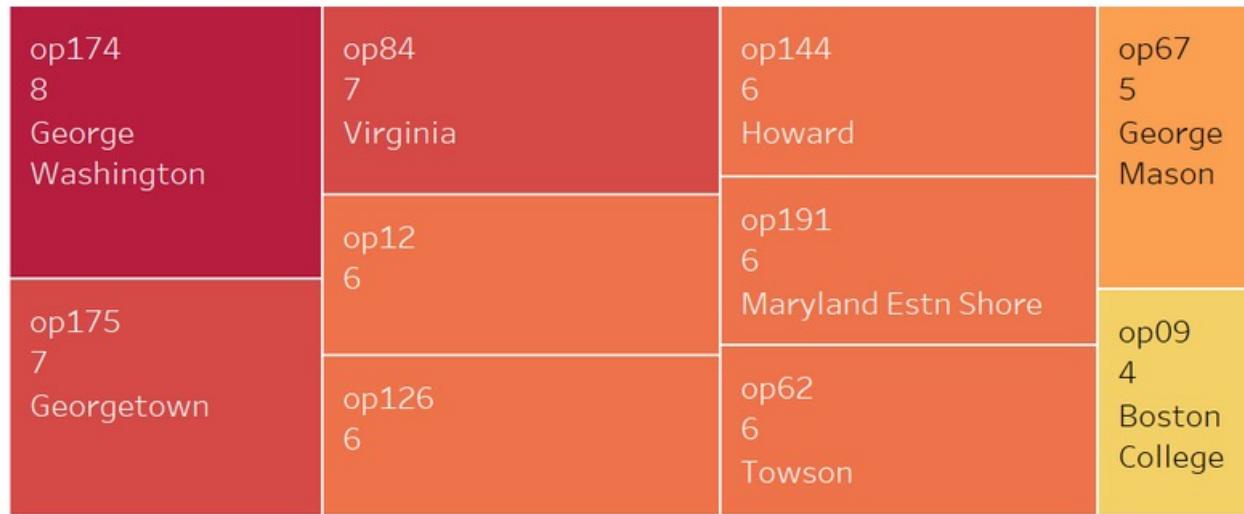
DASHBOARD



What are the details of the top 10 teams that Maryland has lost against the maximum number of times?



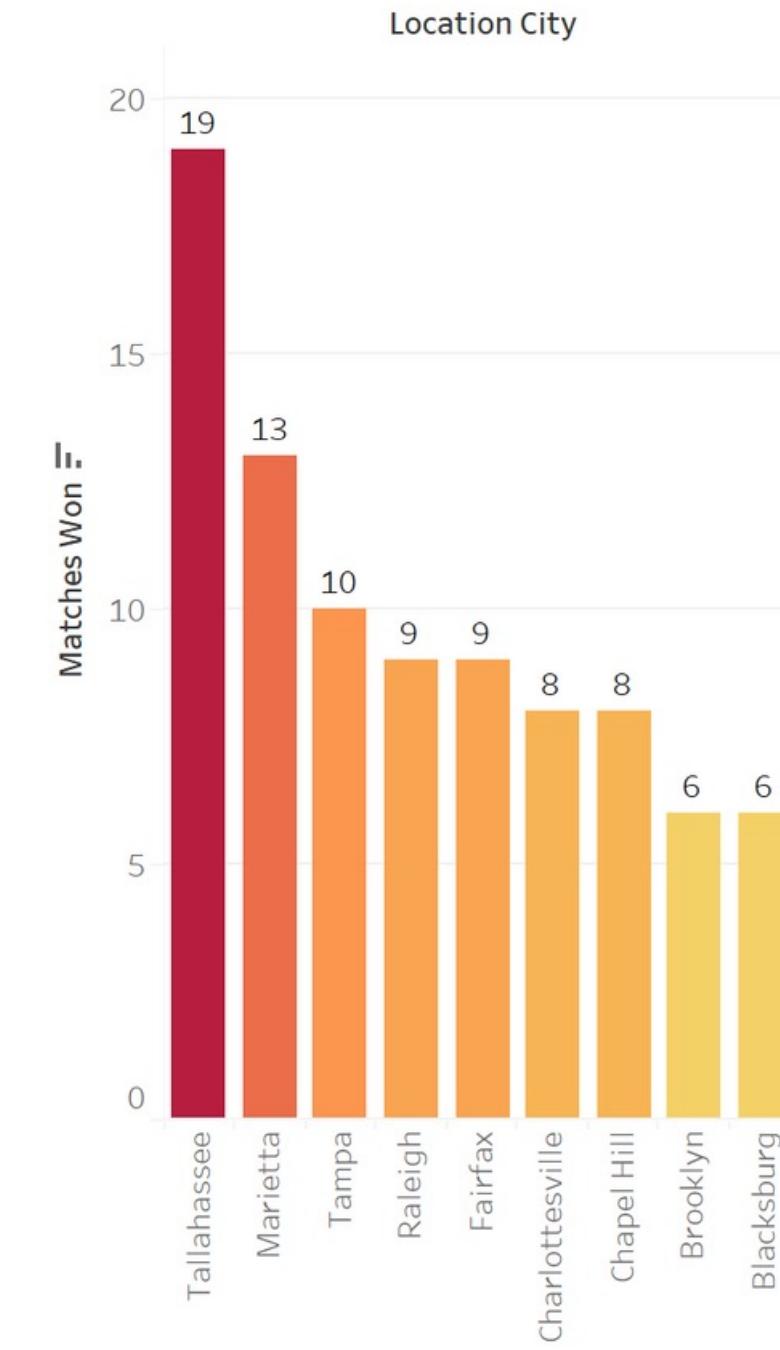
What are the details of the top 10 teams which Maryland has won against keeping a Shutout?



What are the details of the teams against which Maryland has Lost by the highest margin?



What are the details top 10 away locations where Maryland has won the most number of times?



What are the details of the teams against which Maryland has won the maximum number of times?





INSIGHTS

- Number of “Shutouts” indicate impressive defensive play from the team, as it reflects a strong performance in preventing the opposing team's hitters from reaching home plate. It signifies effective pitching, solid fielding, and teamwork to keep the opponent from scoring. Maryland's team showed impressive defensive play against George Washington 8 times, Georgetown 7 times etc.
- In contrast, Maryland's defeat with the highest margins against teams like Nebraska, Ohio State, Clemson etc. show where their pitching, fielding and overall defense was weak. They should focus on defensive aspects of their game against these opponents.
- Maryland has dominated the most against teams like Virginia, Delaware State, Towson etc. They should be confident when playing against these teams.
- The maximum number of defeats against teams like Georgia Tech, Florida State, North Carolina etc. shed light on against whom Maryland should practice more, get more fan support and improve their overall performance.

QUESTIONS?

TRANSFORMING TEAMS TO TRIUMPH

THANK YOU

