Design

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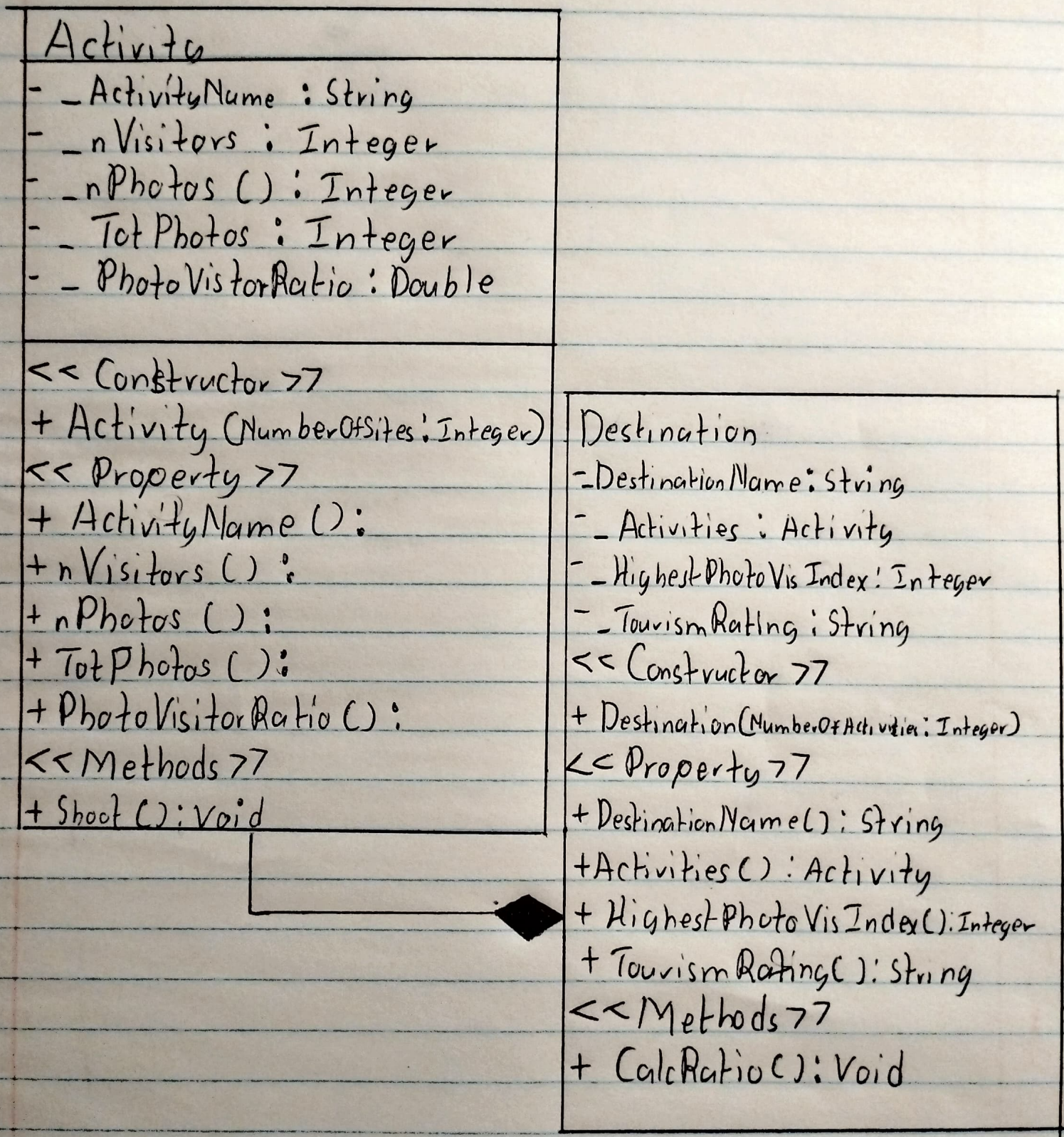
Inputs	Outputs
• Number of Destinations, Activities per Destination and Social Media Sites reviewed for each Activity. • Relevant Destination (and their related Activities) •	• Total photographs that have been uploaded to each social media site. • Photos-Visitors ratio • Index of the Activity that has the Highest Photos-Visitors Ratio • Each Destination's Tourism Rating • Increasing or remaining the same ~~(Index of~~

Variables

- n Destinations - Integer
- n Activities Per Dest - Integer
- n Social Media Sites - Integer
- Destinations - Destination

UML2


Activity
- _ActivityName : String
- _nVisitors : Integer
- _nPhotos () : Integer
- _TotPhotos : Integer
- _PhotoVistorRatio : Double
<< Constructor >>
+ Activity (NumberOfSites : Integer)
<< Property >>
+ ActivityName ():
+ nVisitors () :
+ nPhotos () :
+ TotPhotos () :
+ PhotoVisitorRatio () :
<< Methods >>
+ Shoot () : Void
Destination
- DestinationName : String
- _Activities : Activity
- _HighestPhotoVisIndex : Integer
- _TourismRating : String
<< Constructor >>
+ Destination (NumberOfActivities : Integer)
<< Property >>
+ DestinationName () : String
+ Activities () : Activity
+ HighestPhotoVisIndex () : Integer
+ TourismRating () : String
<< Methods >>
+ CalcRatio () : Void

Events	Actions
• btnSetup is clicked	• Take in ~~number~~ input for nDestinations, nActivitiesPerDest and nSocialMediaSites • Setup grid and resize array
• btnCaptVal is clicked	• Take in data for each Destination and their related Activities and store in a single array
• btnCalcTotPhotos is clicked	• Calculate and store the total photographs that have been uploaded to each social media site for each activity at each Destination.
• btnCalcRatio is clicked	• Calculate, store and display the Photos-Visitors ratio for each Activity at each Destination
• btnCalcIndex is clicked	• Calculate, store and display the index of the Activity that has the Highest Photos-Visitors Ratio for each destination

Events	Actions
• btnTourismRating is clicked	• Calculate, store and display the ~~Dec~~ Destinations Tourism Rating for each Destination
• btnIcreaseOrSame is clicked	• Assess the Index of the Highest Photos-Visitors Ratio ~~fo~~ of each Destination, ~~check~~ are the values increasing or remaining the same • Display in a textbox

Interface

frmDestination

btnSetup

Setup

grdDestination

	D1	D2	
Act 1			
Act 2			
Index			
Rating			

btnCaptVal

Capture Values

btnCalcTotPhotos

Calculate Total Photos

btnCalcRatio

Calculate Ratio

btnCalcIndex

Calculate Index

btnTourismRating

Tourism Rating

btnIncreaseOrSame

Increase Or Same

txtIncreaseOrSame

Algorithm

1. Take in inputs from user
   1. nDestination ← Prompt user for number of Destinations
   2. nActivitiesPerDest ← Prompt user for number of activities
   3. nSocialMediaSite ← Prompt user for number of social Media Sites.
2. Take in relevant data for each destination and its offered activities. ~~and displa~~
3. Calculate total photographs
   1. TotalPhotos ← Sum of photographs ~~for~~ at each activity
4. Calculate the Photos-Visitors ratio
   1. Display ratio in the grid
5. Calculate the index of the activity that has the highest Photo-Visitors Ratio
   1. Max ← Highest Photo-Visitor Ratio
   2. MaxIndex ← Index of the activity
   3. Display index in the grid.
6. Calculate the tourism rating for each destination
   1. Display tourism rating in grid.
7. Assess the index ~~for~~ of the highest Photos-Visitors ratio
   1. ~~Display tred~~ txt IncreaseOrSame ← Trend

Test Data

Number of destinations: 2
Number of activities: 2
Number of social media sites: 2

Destination Name:	D1		D2	
Activity Name	Act1D1	Act2D1	Act1D2	Act2D2
Number of visitors	10	20	20	10
Number of Photos	10 | 10	10 | 10	30 | 30	30 | 20
Ratio	2	1	3	5
Index	1		2	
Tourism Rating	B		A	
Increase Or Same	Increasing			