


Cases in Automation: Loops

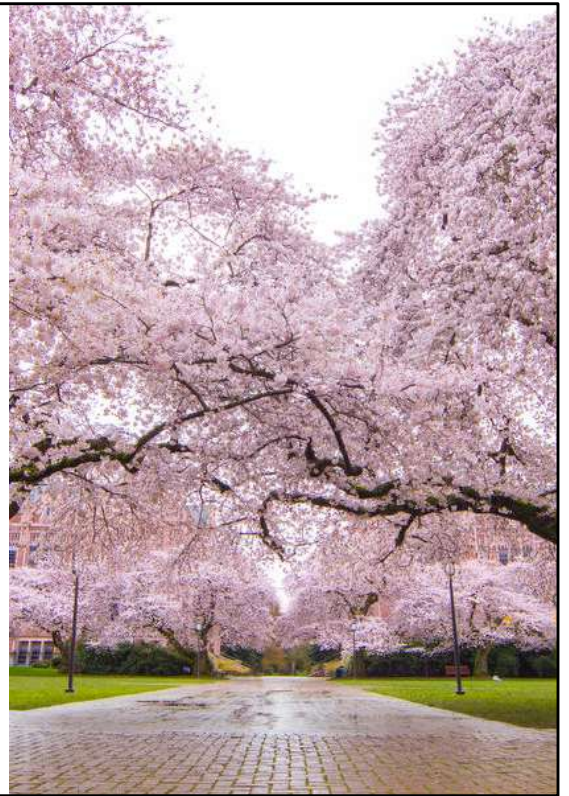
Adv. Advisory | ACCTG 528 | Class 07
MPAcc Class of 2026

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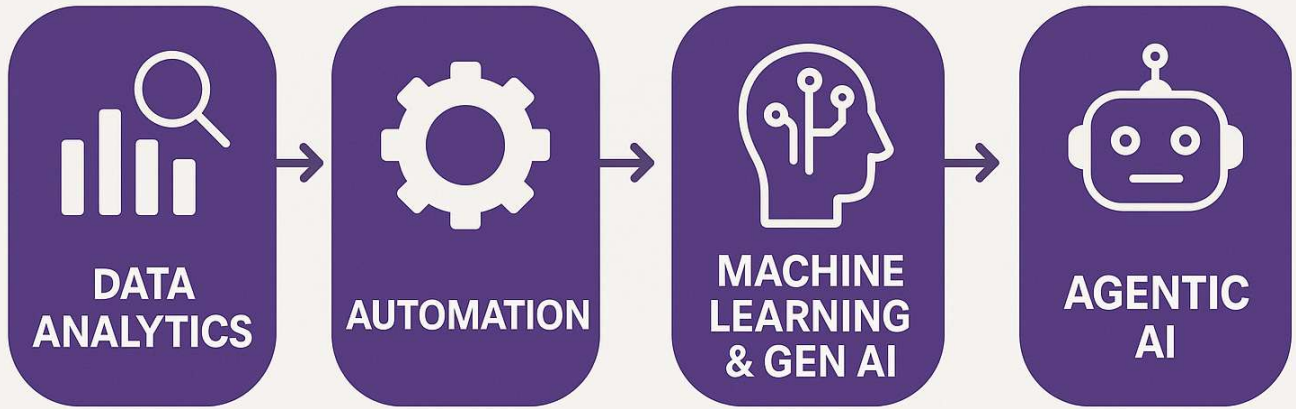
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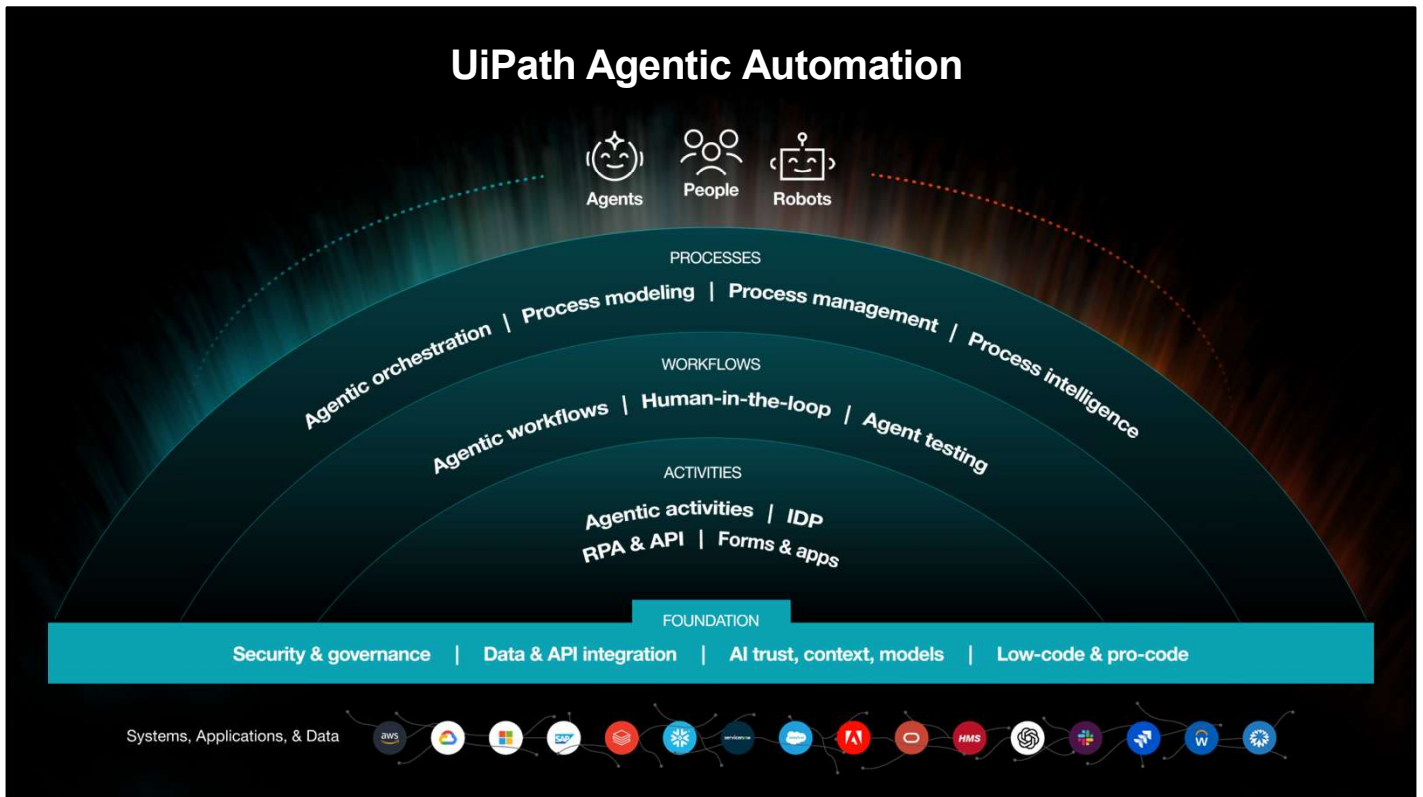
What will we do today?

- **Review**
 - **Design Concepts**
- RPA Mini-Case 1
 - Web to spreadsheet
- RPA Mini-Case 2
 - Merge two spreadsheets



Course Diagram (high-level)





- Everything happens in one place: the UiPath Platform—where AI Agents aren't just assistants, they're true work partners, transforming complexity into a seamless, orchestrated operation.

- We break it down into three powerful layers: **Activities** (the building blocks—reading, processing, integrating), **Workflows** (connecting the dots with human-in-the-loop and testing), and **Processes** (the big picture—managing, optimizing, and enhancing enterprise operations).

- Agentic Orchestration / Maestro takes automation even further—coordinating UiPath Agents, third-party AI models, people, robots, and tools into a single, intelligent system.

- Your existing systems don't need to be reinvented—our platform integrates seamlessly with your data, applications, and workflows while maintaining enterprise-grade security, governance, and AI trust.

- We're not just compatible with your tech stack—we enhance it. From cloud providers like AWS, Google, and Azure to enterprise apps like Salesforce and SAP, we turn digital chaos into a symphony of efficiency.

Looking ahead

Where do your individual and team projects go next?

Individual:

- Appropriate identification rules-based automation
- Selection of appropriate automation spectrum model

Team:

- Appropriate mix of RPA, Agent, and human in the loop
- Selection of best cases for agent decision enhancement

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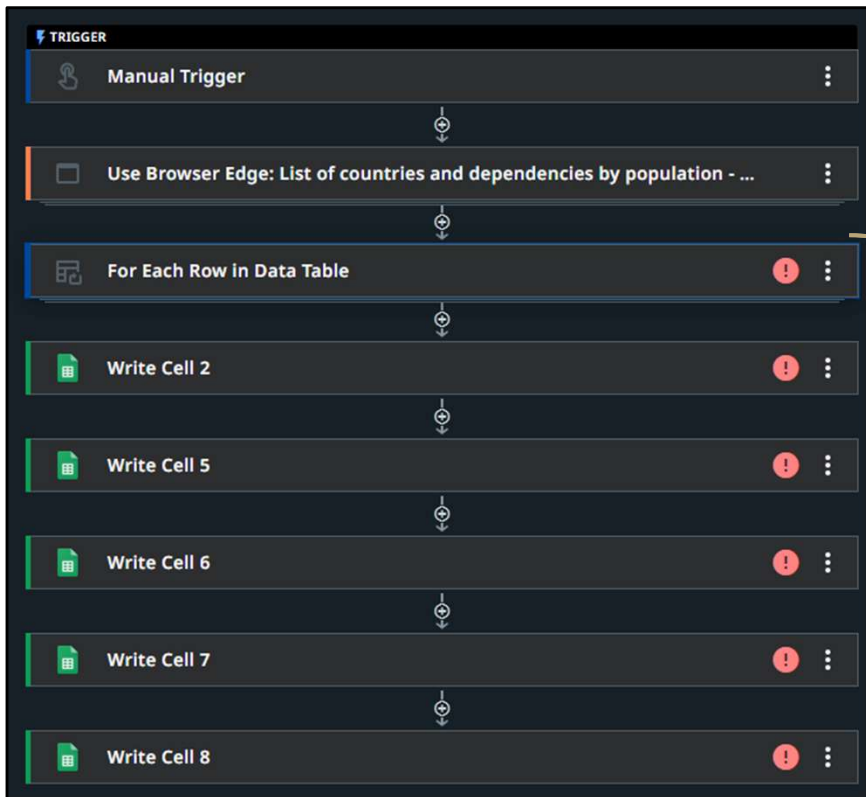
RPA Mini-Case 1

- Input data: Wikipedia Table of World population by Country
- Output data: A spreadsheet with numerical populations for the top 20 countries by population, a sum of the top 20 countries population, and a percentage of the world's population.

List of countries and territories by total population

	Location	Population	% of world	Date	Source (official or from the United Nations)	Notes
	World	8,232,000,000	100%	13 Jun 2025	UN projection ^{[1][3]}	
1	India	1,417,492,000	17.2%	1 Jul 2025	Official projection ^[4]	[b]
2	China	1,404,890,000	17.0%	31 Dec 2025	Official estimate ^[5]	[c]
3	United States	341,784,857	4.1%	1 Jul 2025	Official estimate ^[6]	[d]
4	Indonesia	288,315,089	3.5%	31 Dec 2025	National annual projection ^[7]	
5	Pakistan	241,499,431	2.9%	1 Mar 2023	2023 census result ^[8]	[e]
6	Nigeria	223,800,000	2.7%	1 Jul 2023	Official projection ^[9]	
7	Brazil	213,421,037	2.6%	1 Jul 2025	Official estimate ^[10]	
8	Bangladesh	169,828,911	2.1%	14 Jun 2022	2022 census result ^[11]	[f]
9	Russia	146,028,325	1.8%	1 Jan 2025	Official estimate ^[13]	[g]
10	Mexico	131,001,723	1.6%	31 Dec 2025	National quarterly estimate ^[14]	
11	Japan	122,850,000	1.5%	1 Mar 2026	Monthly national estimate ^[15]	
12	Philippines	114,123,600	1.4%	1 Jul 2025	Official projection ^[16]	
13	Democratic Republic of the Congo	112,832,000	1.4%	1 Jul 2025	UN projection ^[17]	
14	Ethiopia	111,652,998	1.4%	1 Jul 2025	National annual projection ^[18]	
15	Egypt	107,868,296	1.3%	1 Jul 2025	Official estimate ^[19]	
16	Vietnam	102,300,000	1.2%	31 Dec 2025	Official estimate ^[20]	
17	Iran	86,563,000	1.1%	20 Mar 2025	Official projection ^[21]	
18	Turkey	86,092,168	1.0%	31 Dec 2025	Official estimate ^[22]	

	A	B
1	Location	Population
2	India	1417492000
3	China	1404890000
4	United States	341784857
5	Indonesia	288315089
6	Pakistan	241499431
7	Nigeria	223800000
8	Brazil	213421037
9	Bangladesh	169828911
10	Russia	146028325
11	Mexico	131001723
12	Japan	122850000
13	Philippines	114123600
14	Democratic Republic of the Congo	112832000
15	Ethiopia	111652998
16	Egypt	107868296
17	Vietnam	102300000
18	Iran	86563000
19	Turkey	86092168
20	Germany	83497147
21	United Kingdom	69487000
22	France	69081996
23		5644409578
24		
	World Population	8232000000
	Proportion of Top 20 Countries	68.56668584



Starter file:

- Import to studio web
- Process flow is set-up
- Red warning signs indicate an unconfigured step

What will we do today?

- Review
 - Design Concepts
- RPA Mini-Case 1
 - Web to spreadsheet
- **RPA Mini-Case 2**
 - **Merge two spreadsheets**



RPA Mini-Case 2

- Input data: Budget and actual data by department.
- Output data: A spreadsheet comparing budgets and actuals by department with variances (budget – actual).

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	A	B	C	D	E
1	Department	Cost_Center	Account_Code	Period	Budget_Amount
2	HR	CC100	61000	2026-01	25000
3	IT	CC200	62000	2026-01	40000
4	Marketing	CC300	63000	2026-01	30000
5	Finance	CC400	64000	2026-01	50000
6	Ops	CC500	65000	2026-01	45000

actuals_30 ☆ 📁 🌐

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A1 ▾ | fx Department

	A	B	C	D	E
1	Department	Cost_Center	Account_Code	Period	Actual_Amount
2	HR	CC100	61000	2026-01	27000
3	IT	CC200	62000	2026-01	38000
4	Marketing	CC300	63000	2026-01	36000
5	Finance	CC400	64000	2026-01	52000
6	Ops	CC500	65000	2026-01	30000

budget_reconciliation ☆ 📁 🌐

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A1 ▾ | fx Department

	A	B	C	D	E	F	G
1	Department	Cost_Center	Account_Code	Period	Budget_Amount	Actual_Amount	Variance
2	HR	CC100	61000	2026-01	25000	27000	-2000
3	IT	CC200	62000	2026-01	40000	38000	2000
4	Marketing	CC300	63000	2026-01	30000	36000	-6000
5	Finance	CC400	64000	2026-01	50000	52000	-2000
6	Ops	CC500	65000	2026-01	45000	30000	15000

Calculate
Budget - Actual

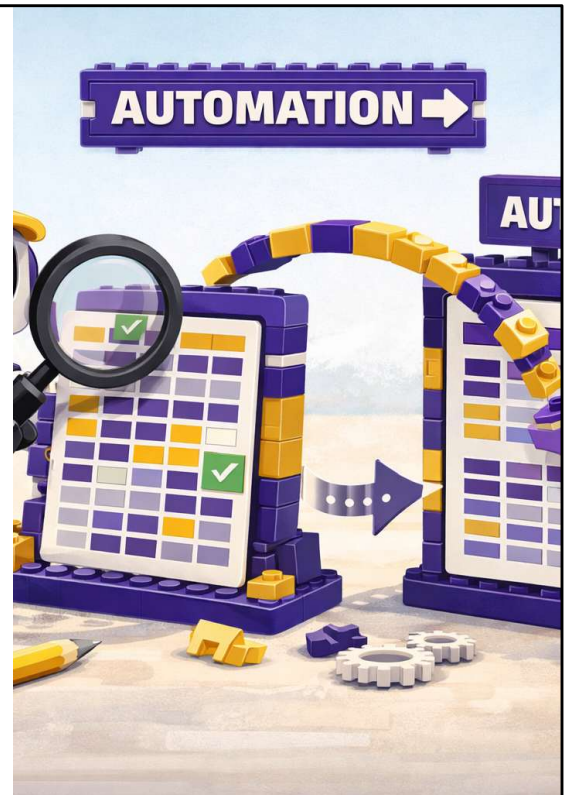
Starter file

A zip file with both files budget_30 and actuals_30 and the starter file example_join_starter.uis.

- Unzip all files
- Save budget_30 & actual_30 to google sheets/drive
- Import the starter uis file to UiPath Studio Web

Where we will go next

- RPA
 - Manipulation of files, components
 - Triggers, Controls, Governance
 - Costs and benefits of RPA
- Agentic
 - BPMN revision and extension
 - Tasks for RPA versus Agent
 - Advanced Prompt Engineering
 - Scalability



Thank you

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