Simulation: Creating an application with PartyRock

Simulation overview

This simulation shows you how to build your own generative artificial intelligence (generative AI) application by using PartyRock.

Objectives

After completing this simulation, you should be able to do the following:

- Use prompt engineering to create an application.
- Edit the widget settings for the application.
- Resize and customize the application interface.
- Add additional widgets.
- Make the application public and share the application.

Duration

This simulation requires approximately **20 minutes** to complete.

Creating an application with Party Rock

Getting started

You can use PartyRock to create a generative AI application using your own prompts. In this scenario, you will create an application that will serve as a resource for others to learn more about famous monarchs and rulers in world history.

- 1. To get started, choose **Build your own app**.
- 2. Choose the **text entry box**. The prompt **Explore the lives of notable monarchs and rulers in world history** will be automatically entered.
- 3. Choose Generate app.
- 4. Choose the Monarch Name widget.
- 5. In the **Monarch Name** text input widget, enter **Margaret I of Denmark**, and then press Enter on your keyboard.
- 6. Choose Edit.

Editing settings

You can tell that PartyRock is now in edit mode from the **Editing app** message at the top of the page. In edit mode, you can resize assets, rearrange them, add widgets, and change the settings of each individual widget.

- 7. Choose each individual icon to learn more about its function. Choose **Next** when you are finished.
- 8. On the Monarch Summary widget, choose the Edit icon.
- 9. For the **Widget title**, choose **Monarch Summary**, and **More About This Monarch** will be entered for you.
- 10. Choose Save to make the change.

The title of the widget has been changed. Return to the summary editing options.

11. On the More About This Monarch widget, choose the Edit icon.

The Model dropdown list shows that Claude has been chosen as the foundation model (FM).

12. Choose the **Model** dropdown list to see the other FMs that are available.

Each available model has 1-3 bars next to it. These bars indicate how much processing power each FM uses when generating content. This information helps you consider how much PartyRock credit your application uses. The more bars it shows, the more credit you'll use. Keep this information in mind when you choose an FM in a live environment.

- 13. To change the FM, choose **Titan Text Light**.
- 14. Choose Save.

That is a much shorter and more condensed summary. Although useful, that probably doesn't work for your project. Next, you change the model.

- 15. On the More About This Monarch widget, choose the Edit icon.
- 16. From the **Model** dropdown list, choose **Jurassic-2 Ultra**.
- 17. Choose Save.

OK, that summary is better. You have more information that a user can work with. Next, you continue to fine-tune this summary widget.

18. On the More About This Monarch widget, choose the Edit icon

Prompt engineering is used to fine-tune the features of the application that you're building in PartyRock. The **Prompt** section contains the description used to create the content of the summary. You can change this summary to provide results in a different manner. Instead of a summary in paragraph form, you change it to a bulleted list.

- 19. Choose the **Prompt** section text. The **detailed summary** will be changed to a **bulleted list**.
- 20. Choose Save.

The information has been rearranged and is now presented as a bulleted list. Although useful, this option is a little too streamlined. Next, you adjust the prompt to include both a summary and a bulleted list.

- 21. On the More About This Monarch widget, choose the Edit icon.
- 22. Choose the **Prompt section text**. The prompt will change back to **summary in paragraph form**, and a prompt to include key points as a bulleted list will be added.
- 23. Choose Save.

Now you have a summary with a mix of both a summary and a bulleted list. Next, you finish examining the section options.

- 24. On the More About This Monarch widget, choose the Edit icon.
- 25. Expand Advanced settings.

Temperature and Top P are advanced parameters. Increasing them will increase the randomness of the information that is generated. These adjustments result in more-creative and imaginative text. Keeping these parameters low will keep the text truer to the actual text. Keep the default settings.

26. Choose **Cancel** to close these settings.

Using chatbots

This PartyRock application also contains a chatbot, which is helpful to if you want additional details about the topic.

- 27. Choose the **scroll bar** to access the full chat window.
- 28. Choose the **Monarch Chat** input field. The question **What was her role in the formation of the Kalmar Union?** will be entered.

The chatbot provides a summary of the Kalmar Union of 1397–1523. The chatbot helps users dive deep into some of the information provided in the summary. A user could ask the chatbot more about the Kalmar Union, or they could ask a completely different question about a person or event in their life.

29. Choose the **scroll bar** to return to the top of the page.

Resizing and moving widgets

PartyRock also allows for visual customization. In the lower corner of each widget is the **Resize** icon. You use this icon to resize the **Monarch Name** and **Monarch Portrait** widgets to reduce wasted space.

- 30. On the **Monarch Name** widget, choose the **Resize** icon. The size will be reduced automatically.
- 31. Choose the scroll bar to access the Resize icon for the Monarch Portrait widget.
- 32. On the **Monarch Portrait** widget, choose the **Resize** icon to reduce the size of the widget. The widget will automatically be resized to the same width as the **Monarch Name** widget.

You can also move assets around on-screen in PartyRock.

- 33. On the **More About This Monarch** widget, choose the **menu bar**. The widget will automatically move next to the **Monarch Name** widget.
- 34. On the **Monarch Chat** widget, choose the **menu bar** to automatically move it.

This adjustment gives you more space. Next, you resize the **More About This Monarch** and **Monarch Chat** widgets to take advantage of this space.

- 35. On the **More About This Monarch** widget, choose the **Resize** icon to automatically increase the width.
- 36. Choose the **scroll bar** to access the **Resize** icon for the **Monarch Chat** widget.
- 37. On the **Monarch Chat** widget, choose the **Resize** icon to automatically increase the width.
- 38. Choose the **scroll bar** to return to the top of the page.

Adding widgets

You can also add widgets to the existing PartyRock application. Monarchs usually have descendants who make their own history. You want to add a widget that lists the monarch's notable children, grandchildren, and so on.

39. Choose Add Widget.

Users have a choice of different types of widgets that they can add.

40. In the new widget, choose each title to learn more about each one.

You're going to add a **Text Generation** widget that uses a prompt that takes the name entered in the **Monarch Name** widget.

41. Choose Text Generation.

The widget appears on-screen, along with the settings window.

42. Choose Widget title. The widget will be renamed Monarch Family Tree.

Leave the **Model** as **Claude**. For the **Prompt**, you want to use the reference to the **Monarch Name**, so you need to enter the rest of the prompt.

- 43. Choose the **Prompt** field. **Provide a list of descendants for [Monarch Name]** will be entered.
- 44. Choose Save.

The widget will generate a list of the monarch's descendants based on the prompt and the input entered into the **Monarch Name** widget. Users can use the chat to learn more about these descendants. If one of these descendants became a king or queen, users could even enter the descendant into the **Monarch Name** widget. Next, you use the **Resize** icon to make this widget the same size as the **Monarch Portrait** widget.

45. Choose the **Resize** icon to automatically make the **Monarch Family Tree** widget the same size as the **Monarch Portrait** widget.

Note that PartyRock automatically moves the widget into the open space underneath the Monarch Portrait widget. Next, you add an **Image Generation** widget to look at some of the options there.

- 46. Choose the **scroll bar** to scroll to the top of the page.
- 47. Choose **Add widget**.
- 48. Choose **Image Generation**.

You already have a portrait of the monarch, so this image provides some color to the page.

49. Choose Widget title. The Life and Times of will be automatically entered.

For **Model**, you will leave it as **Stable Diffusion XL**. **Style preset** is set to **No style preference** by default.

- 50. Choose the Style preset dropdown list. Fantasy Art will be automatically chosen.
- 51. For Image description, choose the text entry field. An illustrative scene from one of the bullet points or paragraphs from [More About This Monarch] will be automatically entered.
- 52. Choose **Advanced settings** to examine the options.

Here are the sliders for CFG scale and Seed. Adjusting these options will determine how closely your image follows the prompt. The higher these go, the more random and creative the image will be from the original prompt. Leave the default settings.

53. Choose Save.

PartyRock has used the information from the More About This Monarch widget to generate a new image. To examine what PartyRock used to generate the image, you can use the **Prompt** icon.

54. On the menu toolbar, choose **Prompt**.

This option will show you the exact prompt that was generated to create this image. Because it's for only illustrative purposes, leave it as is.

55. In the image widget, choose the **Resize** icon to automatically resize the widget to reduce empty space.

You're going to add one more widget. You might find it necessary to provide PartyRock application users with static text. Some uses of this text might be directions or suggestions for the user. You're going to add a list of notable kings and queens to make it easier for users to enter names into the **Monarch Name** field.

- 56. In the center of the playground space, choose **Create Widget**.
- 57. Choose **Static Text**.
- 58. Choose **Widget title. Resource: A List of Notable World Rulers** will be automatically entered.
- 59. Choose the **Content** field, and a pre-prepared list of rulers will be automatically entered into the text box.
- 60. Choose Save.

The widget appears as static text in your PartyRock application.

61. Choose the **Resize** icon to automatically make the list the same width as the **Monarch Chat** widget and move it directly under the **Monarch Chat** widget.

Sharing your app

The application is finished and ready to share.

- 62. Choose the **scroll bar** to scroll to the top of the page.
- 63. Choose the **Close**, or **X**, icon to finish editing.
- 64. Chose **Make public and share** to make your application public and sharable.

A pop-up will verify that the app is now public and remind you that it is available for anyone to see.

65. Choose **Copy link to clipboard** to copy the URL to your project.

Congratulations! You've created your first application with PartyRock!

Simulation complete

Congratulations! You have completed the simulation.

Your feedback is welcome and appreciated.

If you would like to share any suggestions or corrections, provide the details in the <u>AWS Training and Certification Contact Form</u>.

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