

Build fitness application using Amazon PartyRock

Generating a Strength Coach Application

1. Navigate to [AWS PartyRock](#).
2. Click on '**Generate app**' and enter a prompt. Here's an example:



The image shows a screenshot of a web interface for generating an application. It features a large text input area with the placeholder text "Generate a strength coaching application". To the right of the input area is a green "Generate" button. At the top of the dialog is a title bar that says "What do you want to build?" with a close button (X) on the right. At the bottom of the dialog is a footer that says "Inspire me with example prompts" next to a small globe icon.

3. Click **'Generate'** and watch PartyRock work its magic!

The screenshot shows the 'PowerPlan Pro' application interface. At the top, there's a title bar with 'PowerPlan Pro' and a menu with icons for 'Snapshot', 'Remix', 'Share', 'Edit', and a hamburger menu. Below the title bar, there's a 'Welcome' section with a message: 'Welcome to your AI Strength Coach! I'll help you create a personalized workout plan based on your experience, goals, and any limitations. Please provide the information below, and I'll design a program specifically for you.' Below this, there are two input fields: 'Fitness Level' with a dropdown menu and 'Training Experience' with a text area. At the bottom, there's a button that says 'Fill in widgets to play'.

4. PartyRock generated an application that designs a custom workout plan tailored to your experience, goals, and any limitations you provide.

Modifying widgets

1. You can edit widgets by clicking **"Edit"** in the top-right corner of the screen, or by selecting the pencil-and-paper icon on each widget.

This screenshot is similar to the previous one, but it shows the application in an 'edit' state. In the top right corner, there are buttons for '+ Add variable', '+ Add widget', and 'Leave edit'. The 'Fitness Level' and 'Training Experience' widgets now have a pencil-and-paper icon in their top right corners, indicating they can be edited. The 'Fill in widgets to play' button remains at the bottom.

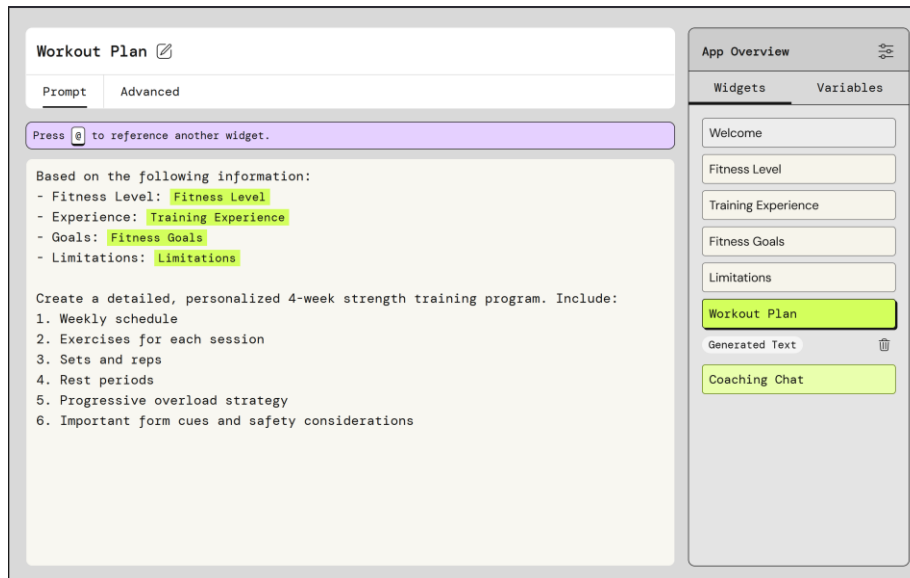
From here, you can adjust attributes such as the **app name**, add variables and widgets, edit the **welcome message**, and change the **size and arrangement** of widgets.

Clicking the pencil-and-paper icon on a widget opens the **App Overview**. From this section, selecting an instruction allows you to further customize attributes such as **placeholder text**, **options for dropdowns**, or applying a **default value**.

The screenshot displays the 'App Overview' interface. On the left, the 'Fitness Level' widget is being edited. It features a 'Placeholder' section with a text input field containing 'Select your current fitness level'. Below this is an 'Options' section with three buttons: 'Beginner X', 'Intermediate X', and 'Advanced X', followed by a text input field labeled 'Enter options'. At the bottom is a 'Default value' section with a dropdown menu showing 'Choose a value as a default'. On the right, the 'App Overview' sidebar is visible, showing a list of widgets: 'Welcome', 'Fitness Level', 'Select', 'Training Experience', 'Fitness Goals', 'Limitations', 'Workout Plan', and 'Coaching Chat'. The 'Workout Plan' and 'Coaching Chat' widgets are highlighted in green.

Example: Editing the “Fitness Level” field under App Overview.

2. Selecting **responses** (highlighted in green) lets you refine the **prompt to the model**. You can adjust context, provide specific guidance, or define how you want the **response formatted**.

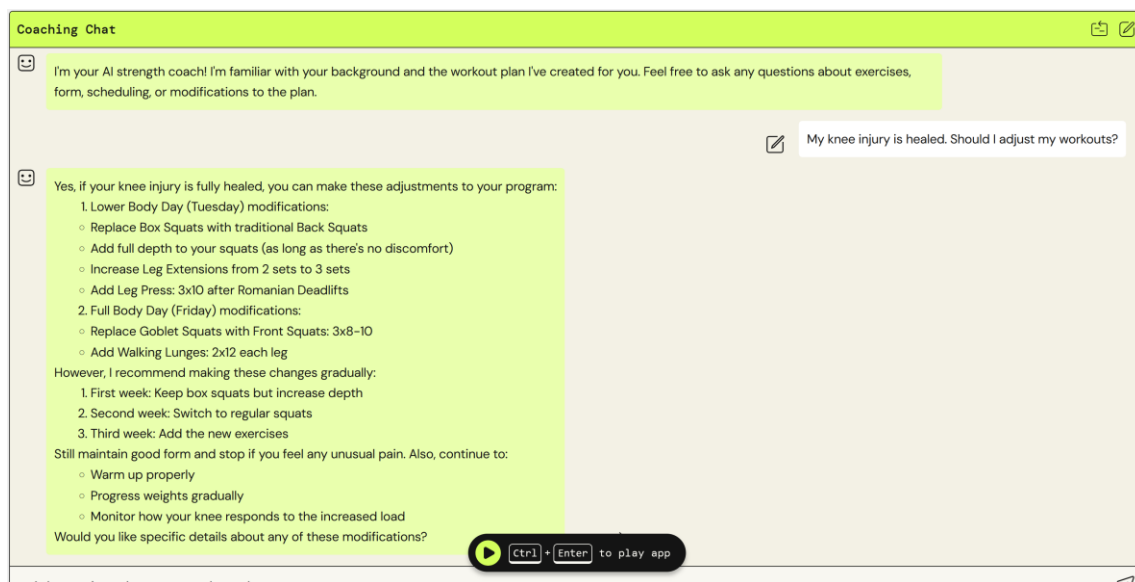


3. Under the **Advanced** tab, you can experiment with multiple large language models. You can also fine-tune:

- **Temperature** – controls creativity. Lower values keep responses more focused and predictable, while higher values make them more varied and imaginative.
- **Top P** – controls probability sampling. Lower values restrict the model to the most likely words, while higher values broaden the range of possible outputs.

Example comparisons:

Coaching Chat with Claude 3.5 Sonnet v2 with Temperature and Top P low:



Coaching Chat with Amazon Nova Micro and Temperature set to 1:

Great to hear that your knee injury has healed! If your knee is now fully healed, we can adjust your workout plan to maximize your strength gains while still being mindful of your previous limitations. Here are some suggestions:

1. **Reintroduce Deep Squats Gradually:** Since your knee is healed, you can gradually reintroduce traditional squats. Start with light weights and focus on form. Box squats can still be used if you need a bit more knee protection.
2. **Increase Weights:** You can start increasing the weights on your exercises, especially if you've been holding back due to your previous injury. Follow the progressive overload strategy closely.
3. **Incorporate Compound Movements:** Since your knee is now stable, you can add more compound movements that put more stress on your muscles and joints, like traditional deadlifts, bench press, and overhead press.
4. **Monitor Form:** Always prioritize form over weight. Even with a healed knee, maintaining proper form is crucial to prevent any future injuries.
5. **Listen to Your Body:** As always, pay attention to how your body responds to the increased intensity. If you experience any discomfort, it's okay to dial back and consult with a professional if needed.

Here's a revised plan with these considerations:

MONDAY – UPPER PUSH

1. Bench Press
 - Weeks 1-2: 4x8-10
 - Weeks 3-4: 5x6-8
 - Rest: 2-3 minutes
2. Overhead Press
 - Weeks 1-2: 4x10
 - Weeks 3-4: 5x8
 - Rest: 2 minutes
3. Incline Dumbbell Press
 - 4x12
 - Rest: 90 seconds
4. Lateral Raises
 - 4x15
 - Rest: 60 seconds
5. Tricep Pushdowns
 - 4x12-15
 - Rest: 60 seconds

TUESDAY – LOWER BODY

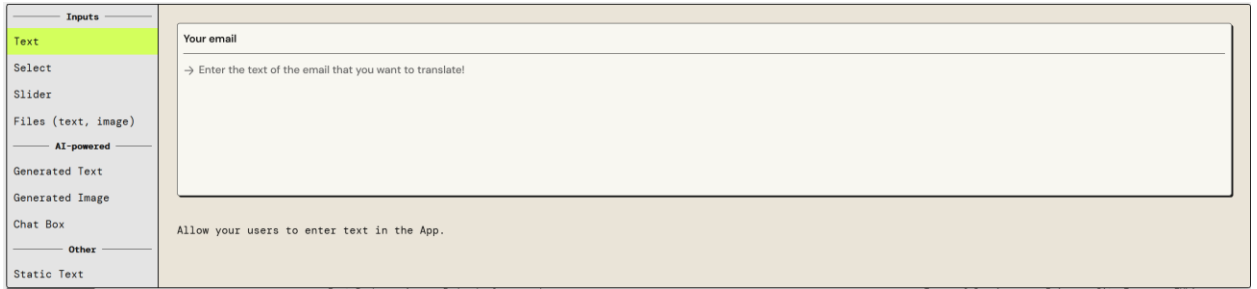
1. Traditional Squats (or Box Squats)
 - Weeks 1-2: 4x8
 - Weeks 3-4: 5x6
 - Rest: 2-3 minutes
2. Romanian Deadlifts
 - 4x10
 - Rest: 2 minutes
3. Bulgarian Split Squats (both legs)
 - 4x10 each leg
 - Rest: 90 seconds
4. Leg Press (light weight)



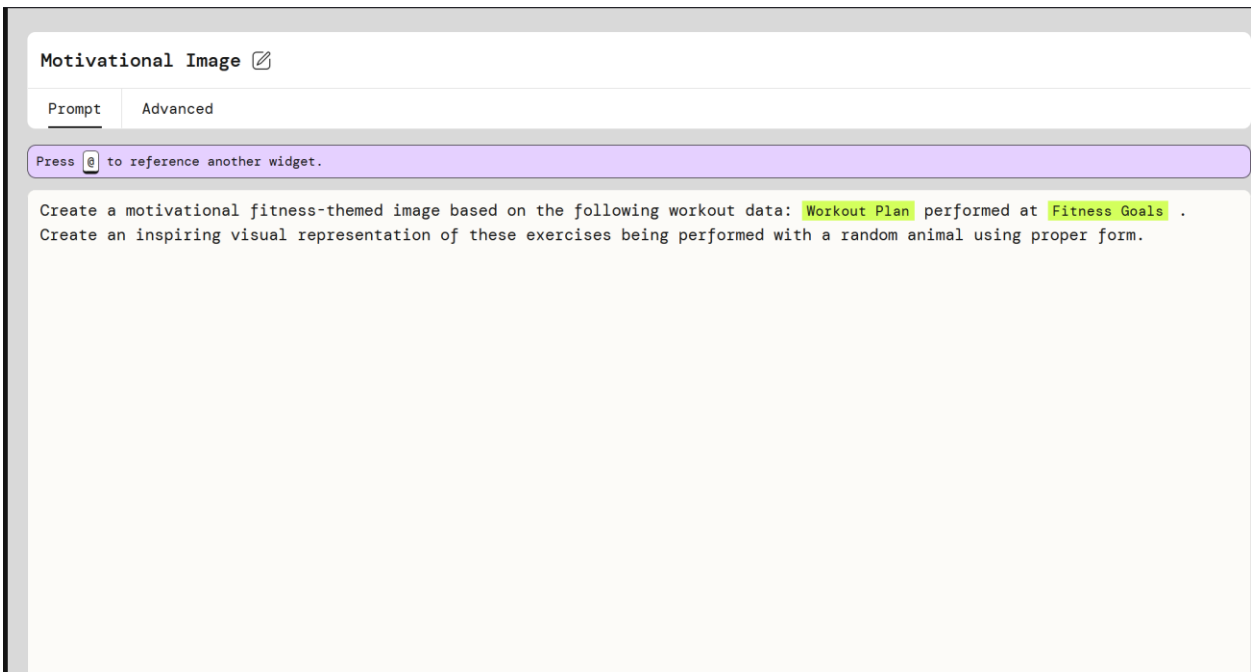
- **Coaching Chat with Claude 3.5 Sonnet v2** (Temperature and Top P set low): provided minor workout adjustments.
- **Coaching Chat with Amazon Nova Micro** (Temperature set to 1): suggested revising the entire workout plan and even added encouragement, e.g., *“Great to hear that your knee injury healed!”*

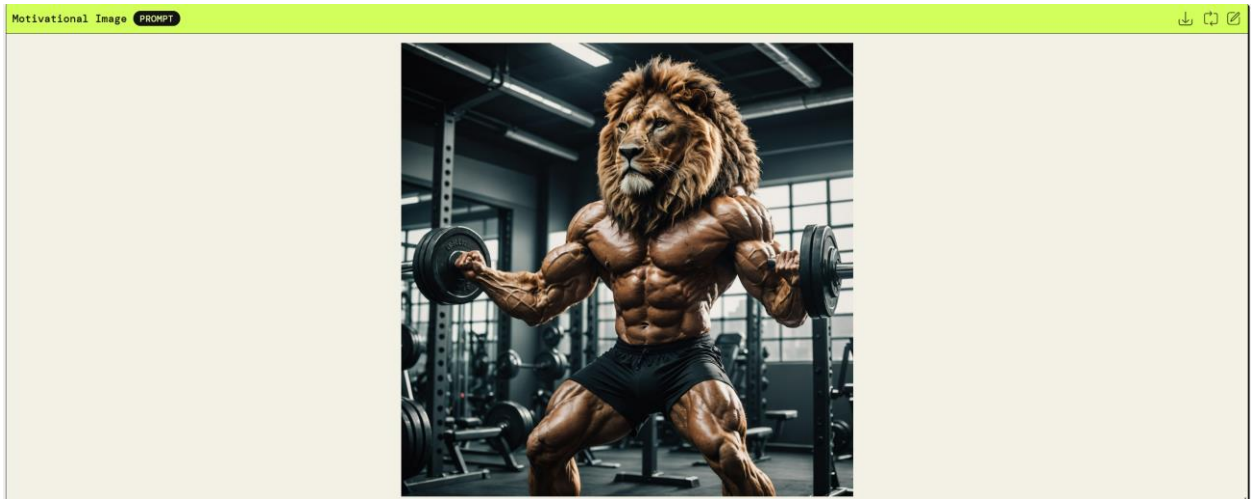
Adding new widgets

1. How about we spice it up a bit now. I love a good AI generated image. So let's add a widget that generates an image.
2. Click on **'Add widget'** in the top right of edit canvas.



3. There are multiple options for different widgets but I want to generate an image. So I selected Generated Image under the AI-powered section.
4. This brings you to the 'App Overview' for you new widget where you can change the name and provide the Prompt.

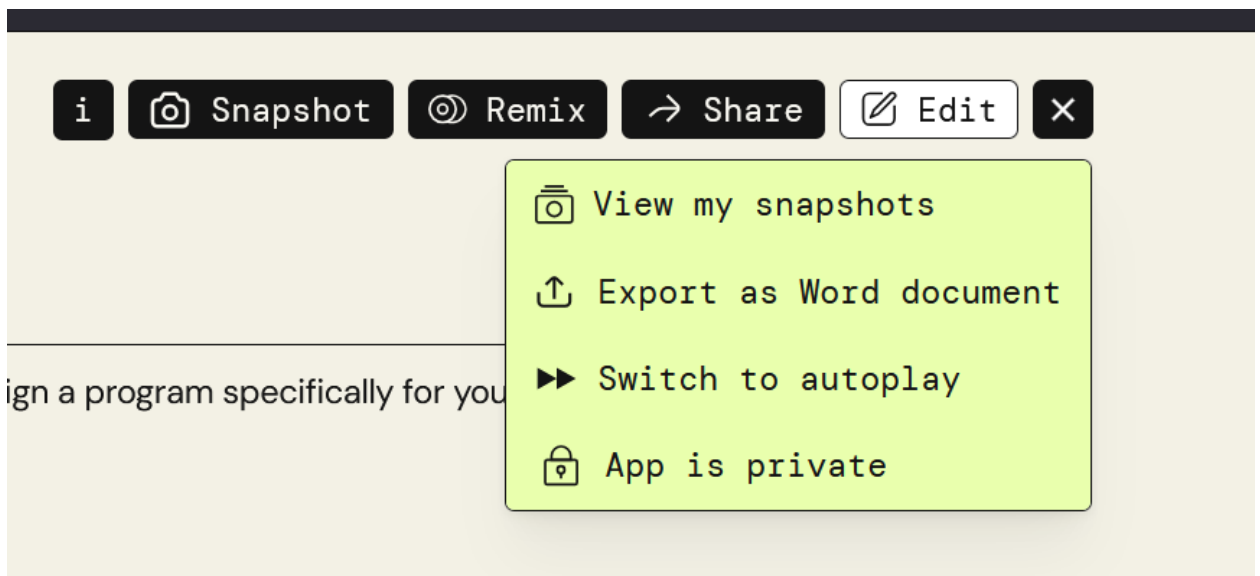




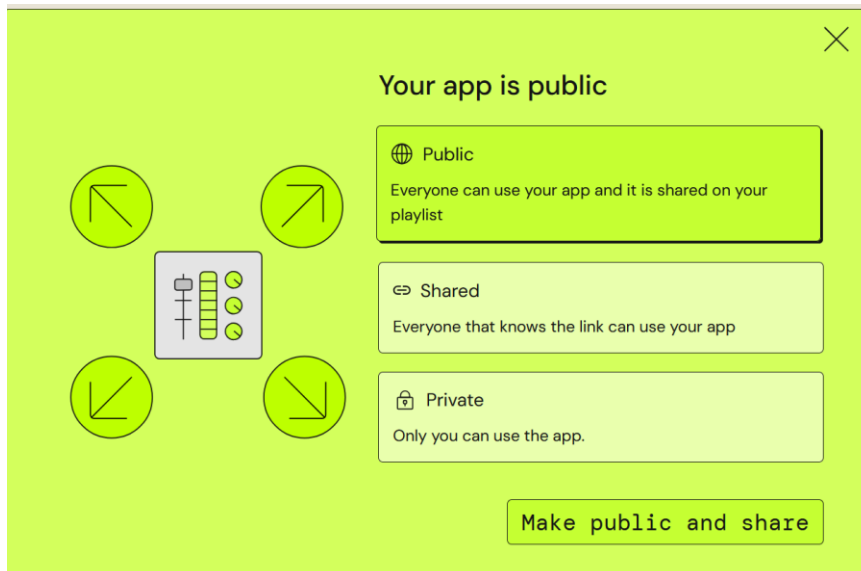
5. My widget generated this buff lion dude and I'm now feeling super pump to try out my new workout plan! You can try adding or changing widgets according to your own imagination. Make it creative and have fun!

Publishing your application

1. Once you've edited your widgets, selected your preferred models, and fine-tuned your prompts, it's time to share your app with the world. **PartyRock allows you to publish your app** so others can use it!
2. On the main screen, click the **square with four lines** in the top-right corner (next to "Edit"). This opens additional options for managing and interacting with your app.



3. Click '**App is private**'. and select '**Public**'



4. Now anyone with the link can use and remix your application!

Here's my Strength coach application:

<https://partyrock.aws/u/Tattootoine/qjHm0Qkpn/PowerPlan-Pro>

Conclusion

At the start of this project, I gave PartyRock a simple prompt: *"Generate a strength coaching application."* It generated a solid app, but I spent some time customizing it to better fit my vision.

However, if my original prompt had been more detailed, for example:

"Create a fitness coaching application with the following features:

- *Generate a personalized workout plan tailored to fitness level, training experience, goals, and limitations.*
- *Include a chatbot that provides advice in the voice and perspective of a professional strength coach.*
- *Generate motivational images based on the user's fitness goals.*
- *Ensure the app feels supportive, practical, and motivational, similar to interacting with a real coach."**

—then PartyRock would have built the same app with far fewer modifications needed.

This highlights the importance of **prompt engineering**. Prompt engineering is the practice of crafting clear, specific, and intentional instructions for AI systems. By giving the model

more context and direction, you can guide it toward better, more accurate, and more useful results. In short: the better your prompt, the better your outcome.

Thanks for building with me—or just following along if you made it this far. I tried to tie in a lesson at the end, and I hope you not only had some fun but maybe picked up something new along the way.