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The SK8 project: A scalable institutional architecture for managing and hosting Shiny applications

David Carayon

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➤ The SK8 project: A scalable institutional architecture for managing and hosting Shiny applications

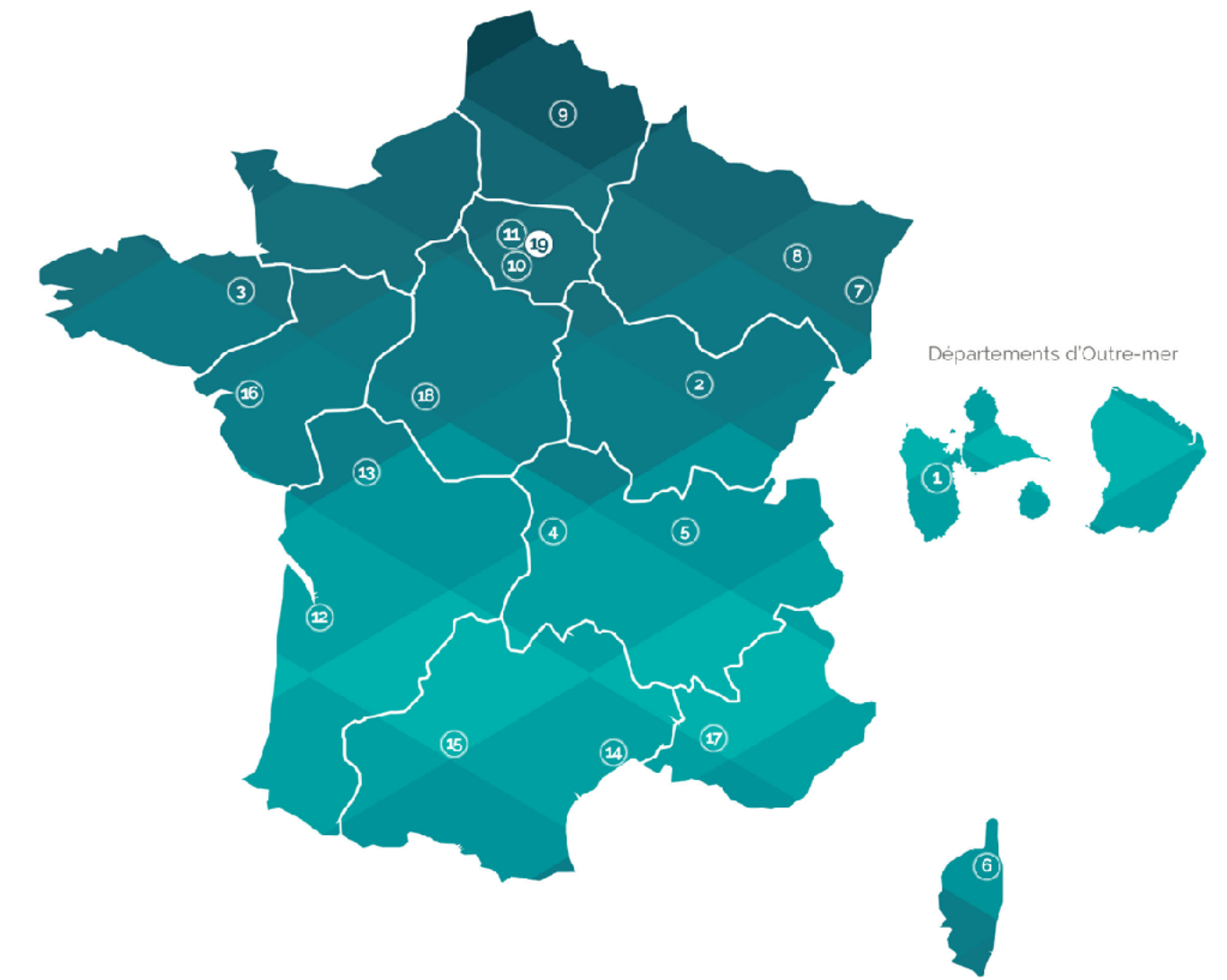
David CARAYON

Statistician

INRAE (France)

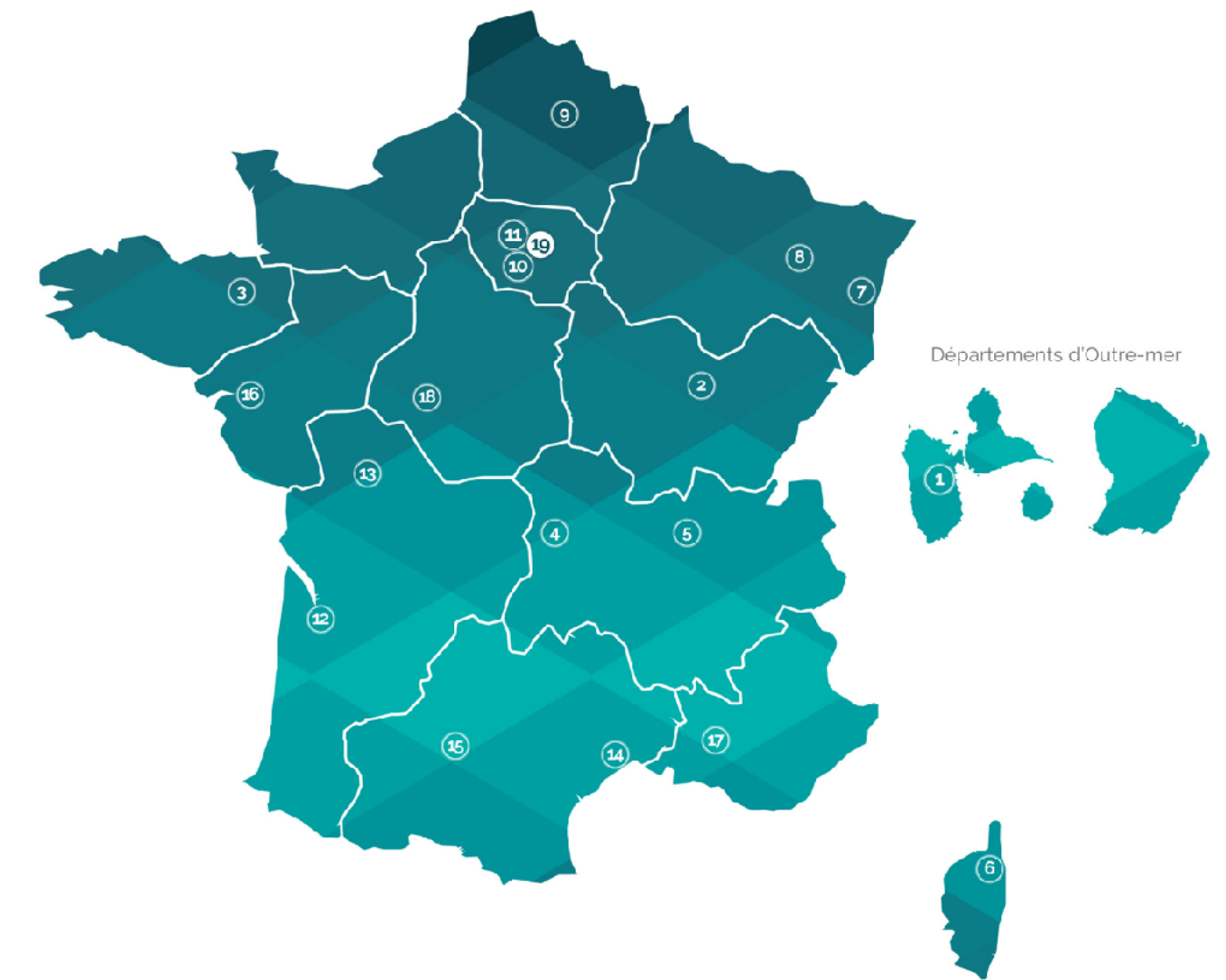
➤ R & Shiny @ INRAE

- French National Research Institute for Agriculture, Food and the Environment
- ~12,000 researchers and engineers



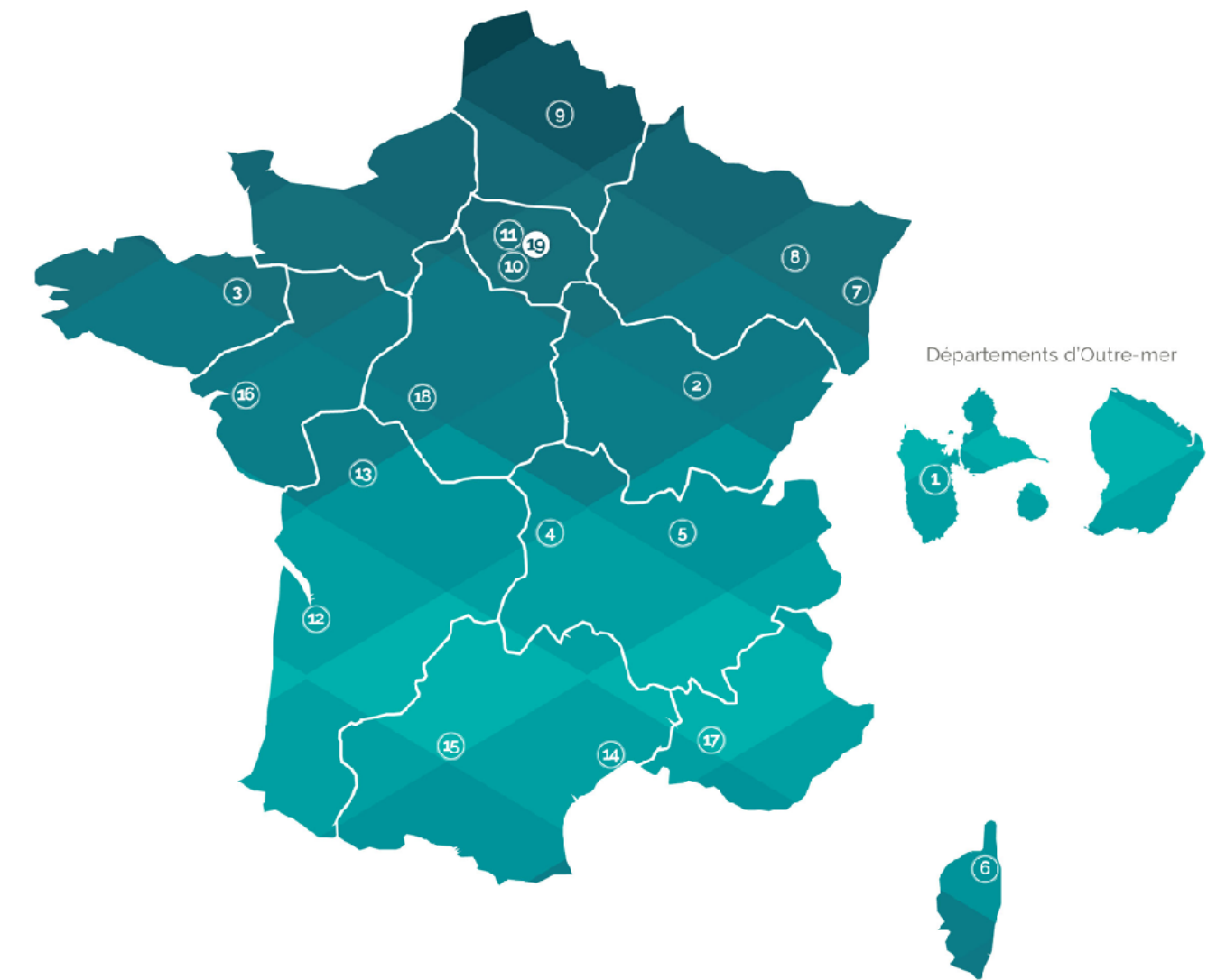
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- Shiny used as a powerful tool to simulate, map, visualise and share research while being accessible for non-IT people (statisticians, biologists)



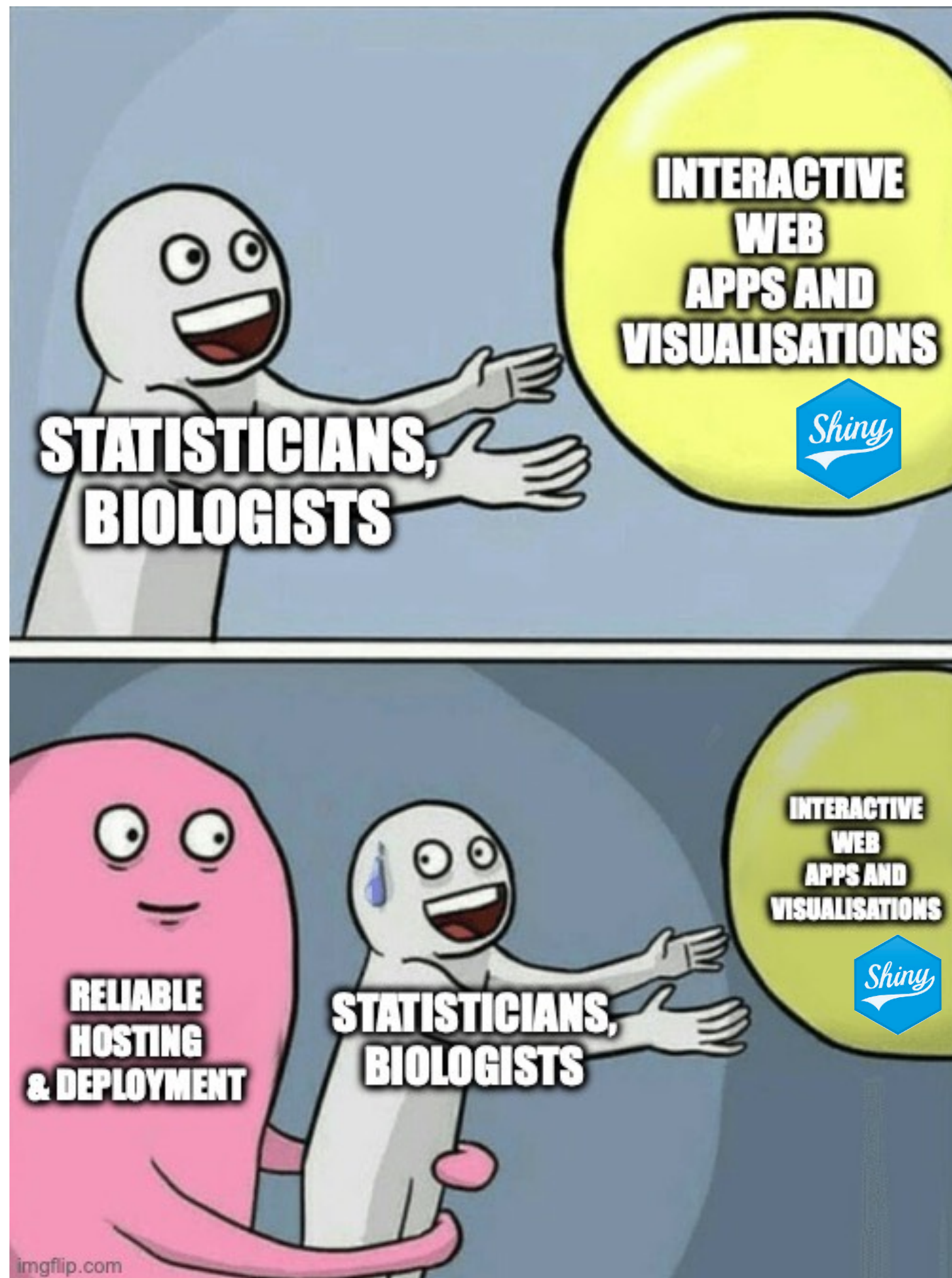
➤ R & Shiny @ INRAE

- French National Research Institute for Agriculture, Food and the Environment
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- Shiny used as a powerful tool to simulate, map, visualise and share research while being accessible for non-IT people (statisticians, biologists)
- SK8 team : ~15 engineers from all over France working on Shiny apps deployments
- **Shiny** **K**ubernetes **S**ervice ➔ SK8SS ➔ 

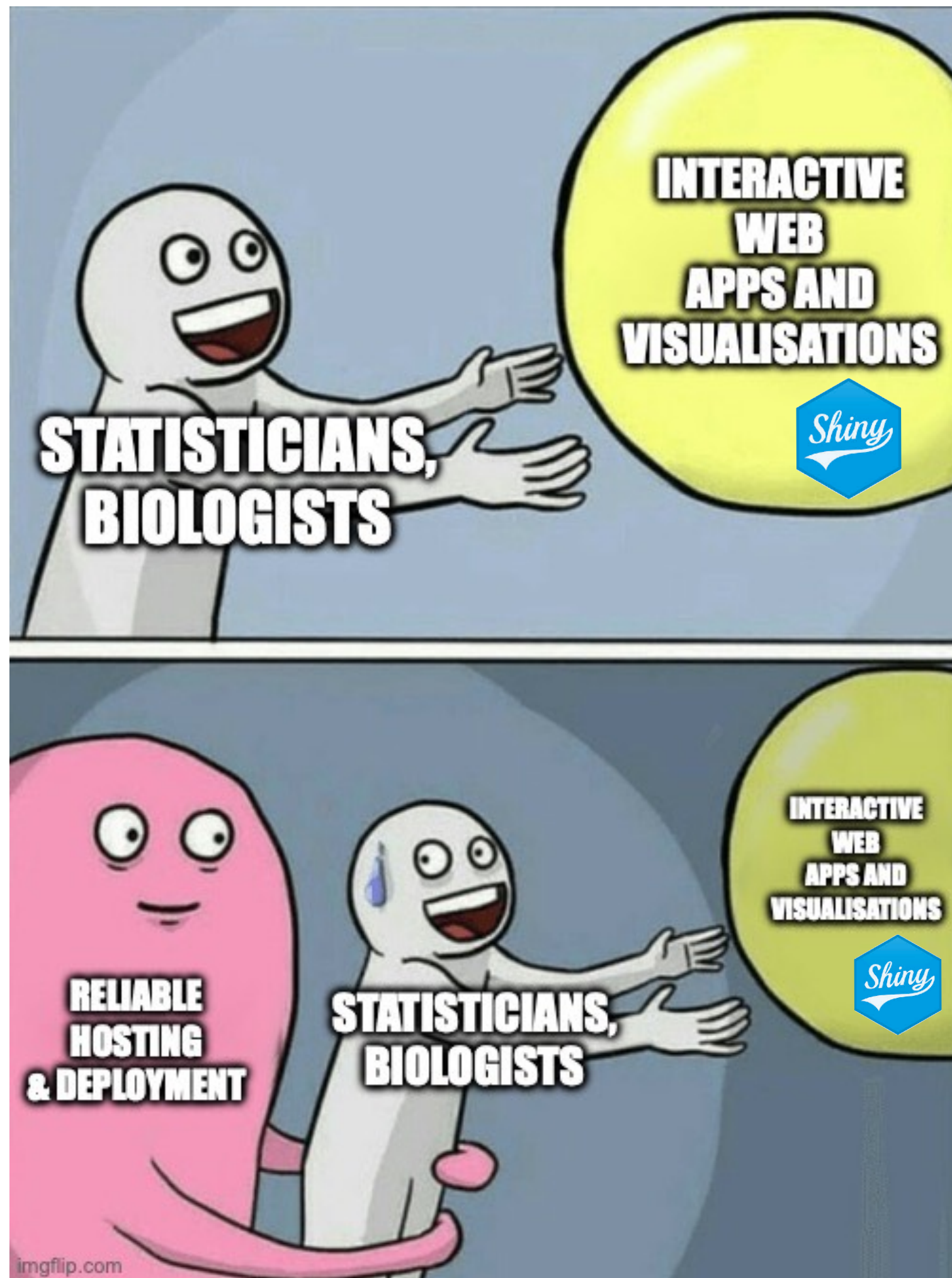


The SK8 🛹 team

➤ The bumps on the road 🚧



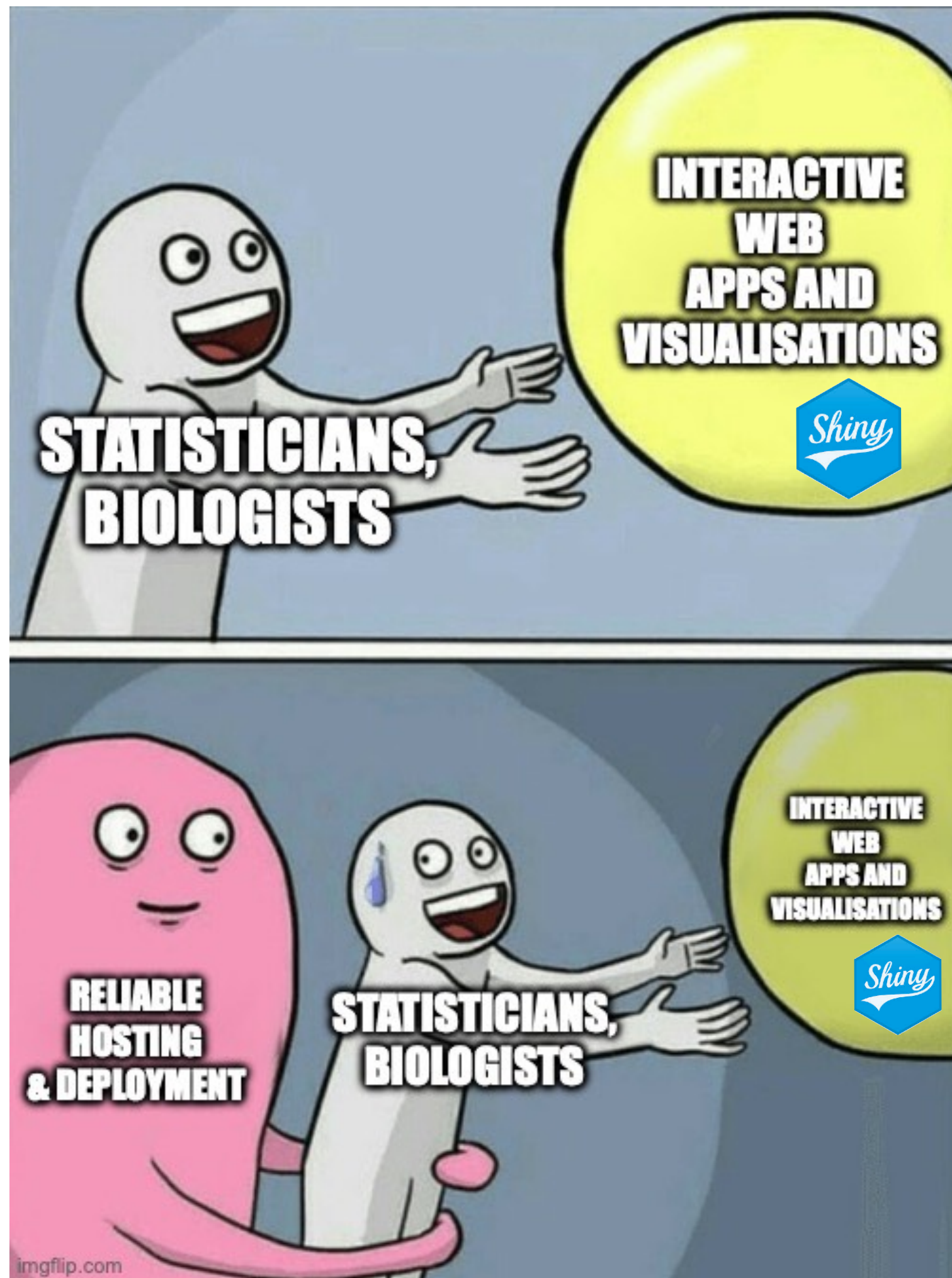
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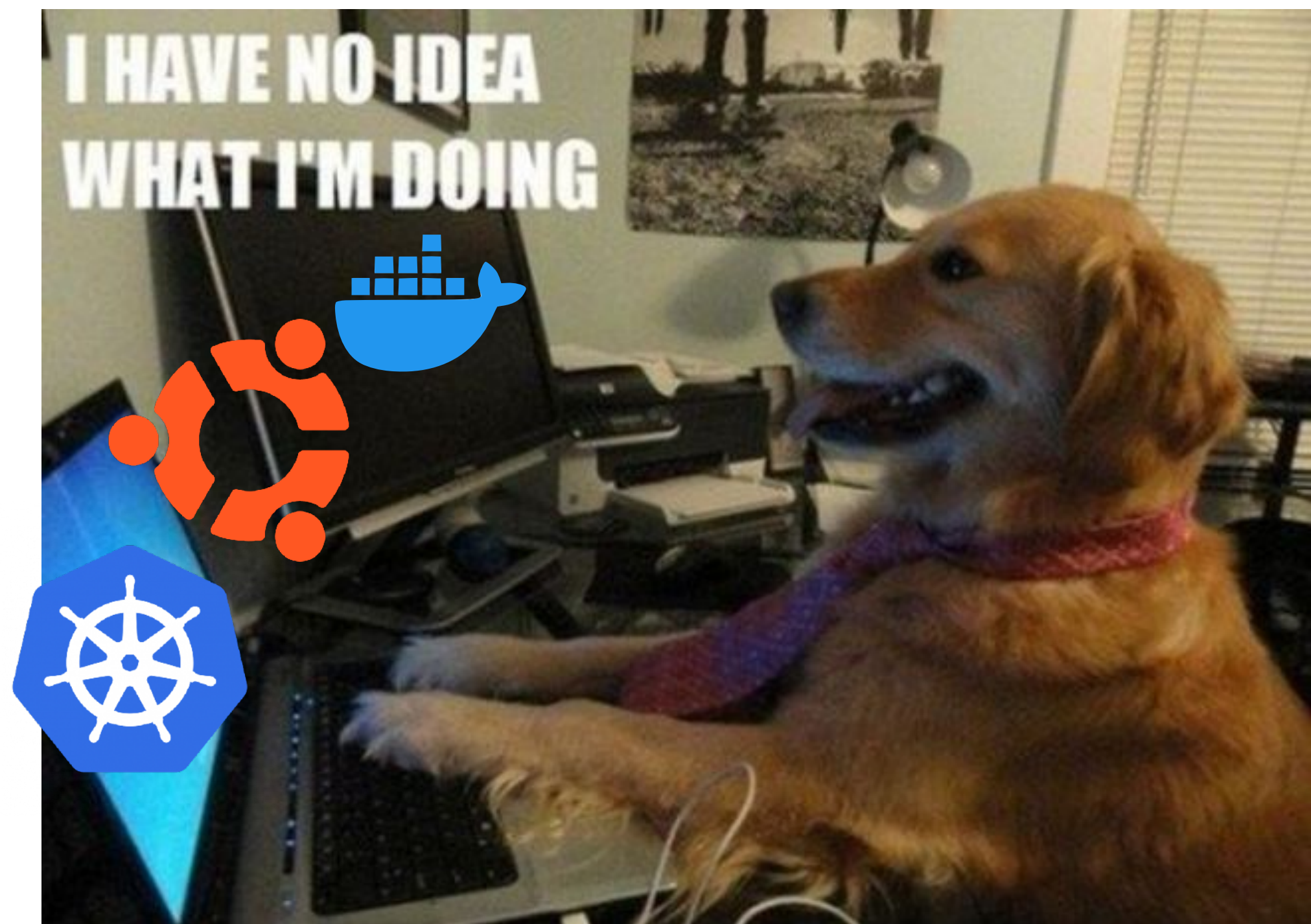
- Paid/Proprietary solutions (Posit, AWS, GCP, etc.) are **not** an option because **public money** and **EU (GDPR)**  **posit**™ Connect  **aws** 



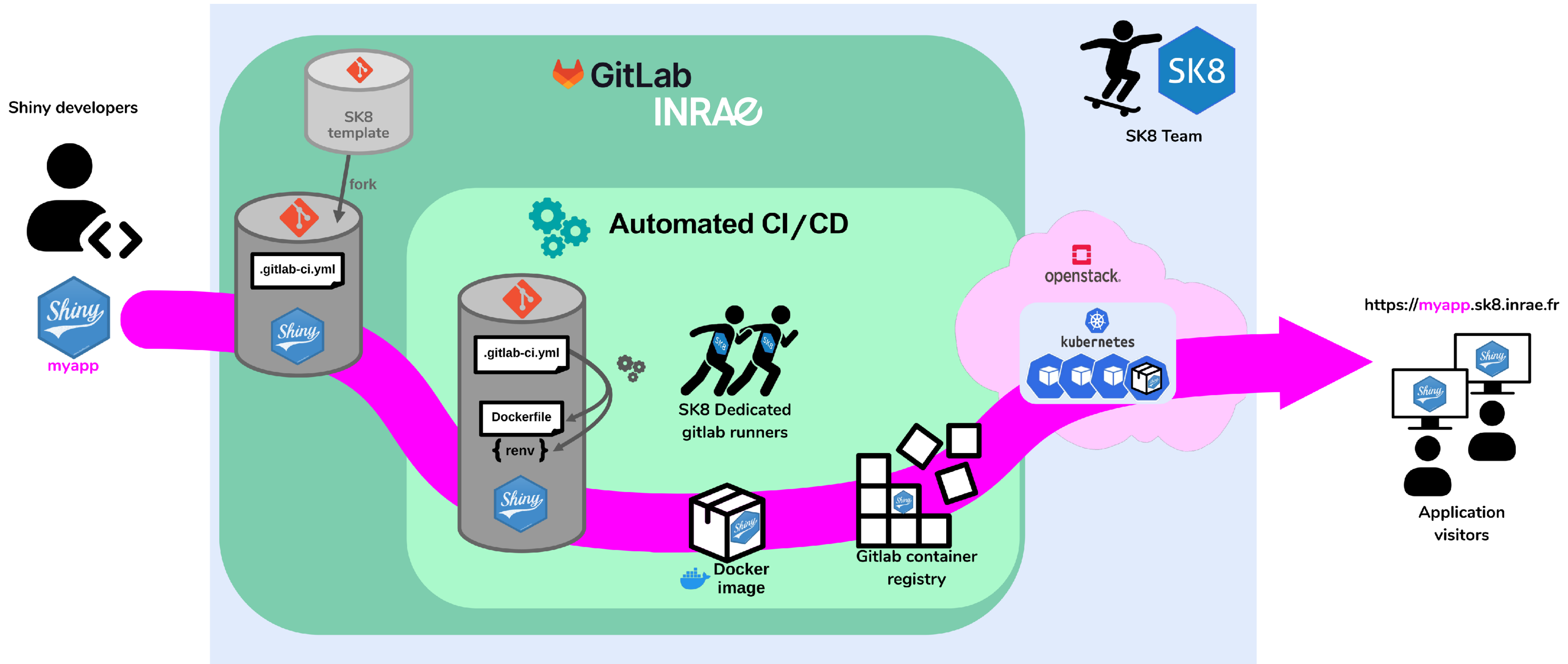
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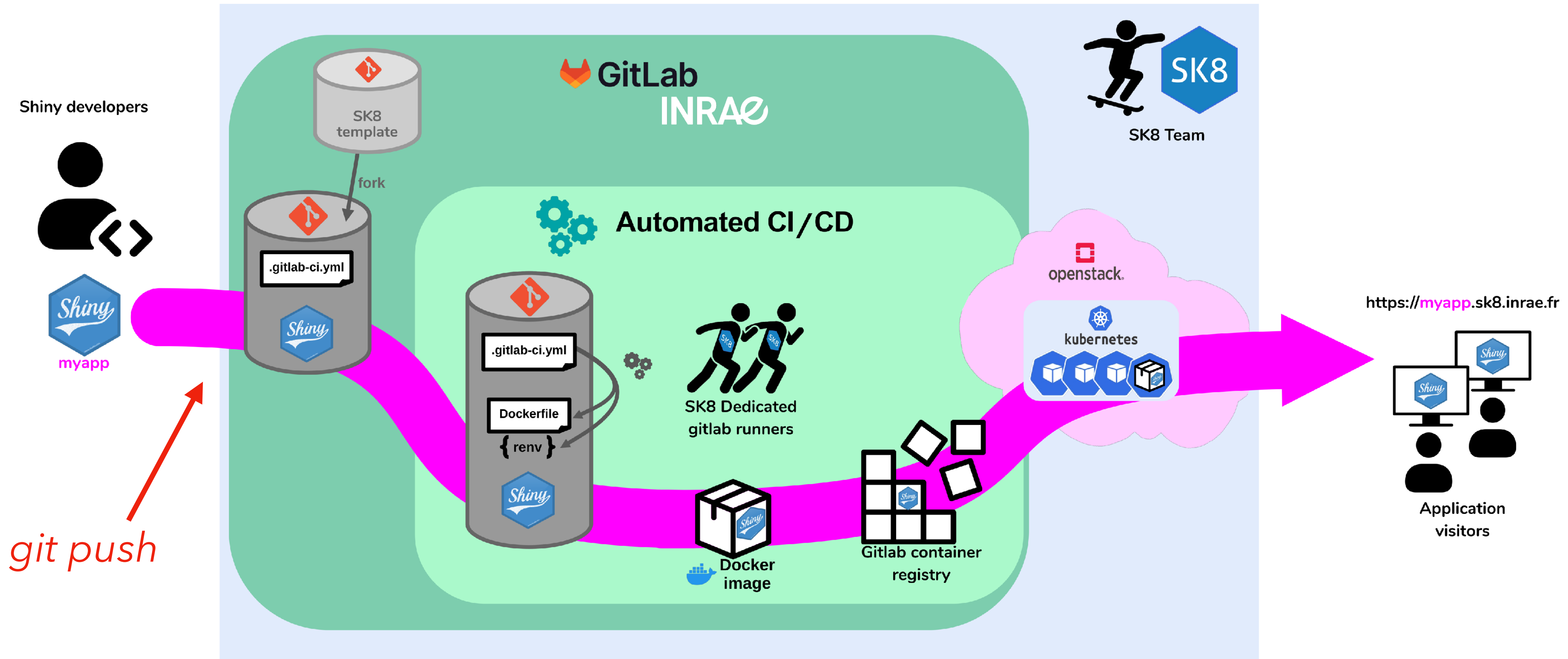
- Paid/Proprietary solutions (Posit, AWS, GCP, etc.) are **not** an option because **public money** and **EU (GDPR)**  **posit**™ Connect  
- Statisticians and biologists are not IT guys



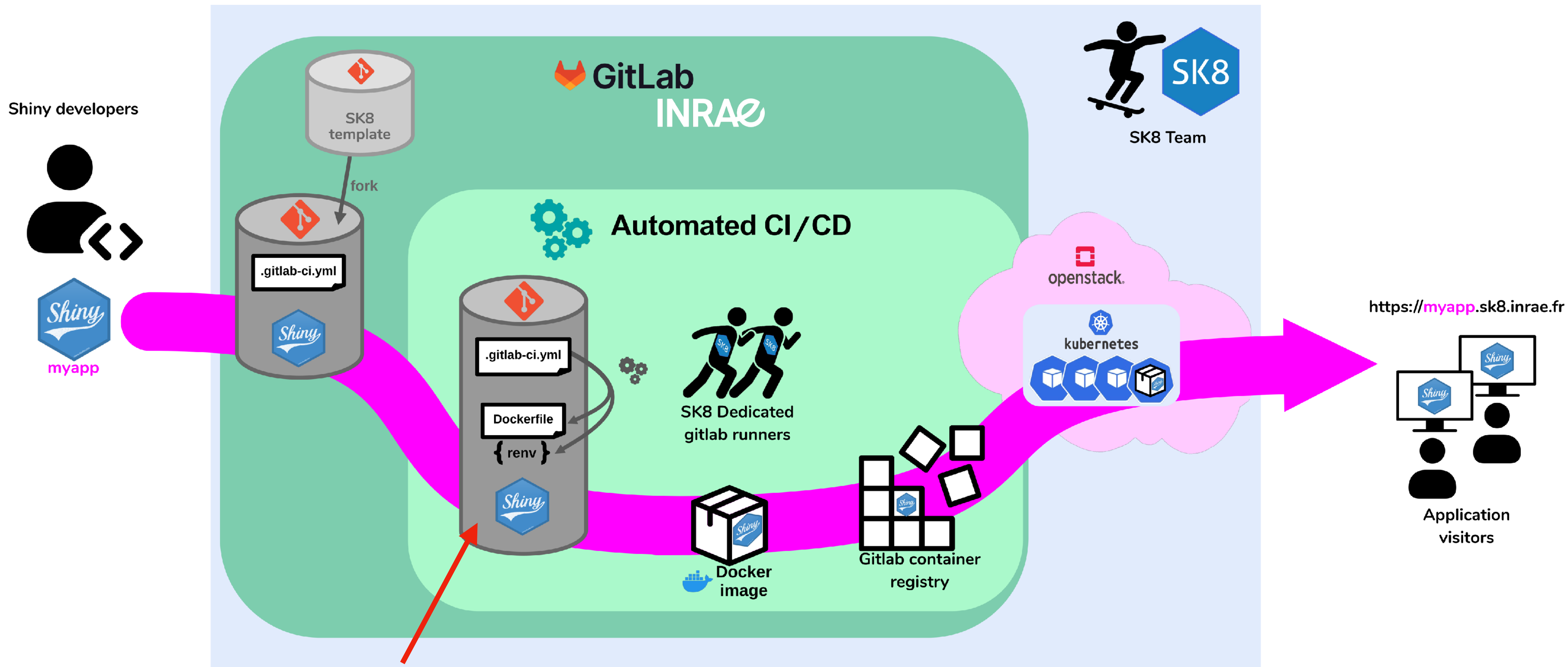
➤ Smoothing the ride 🧠💡



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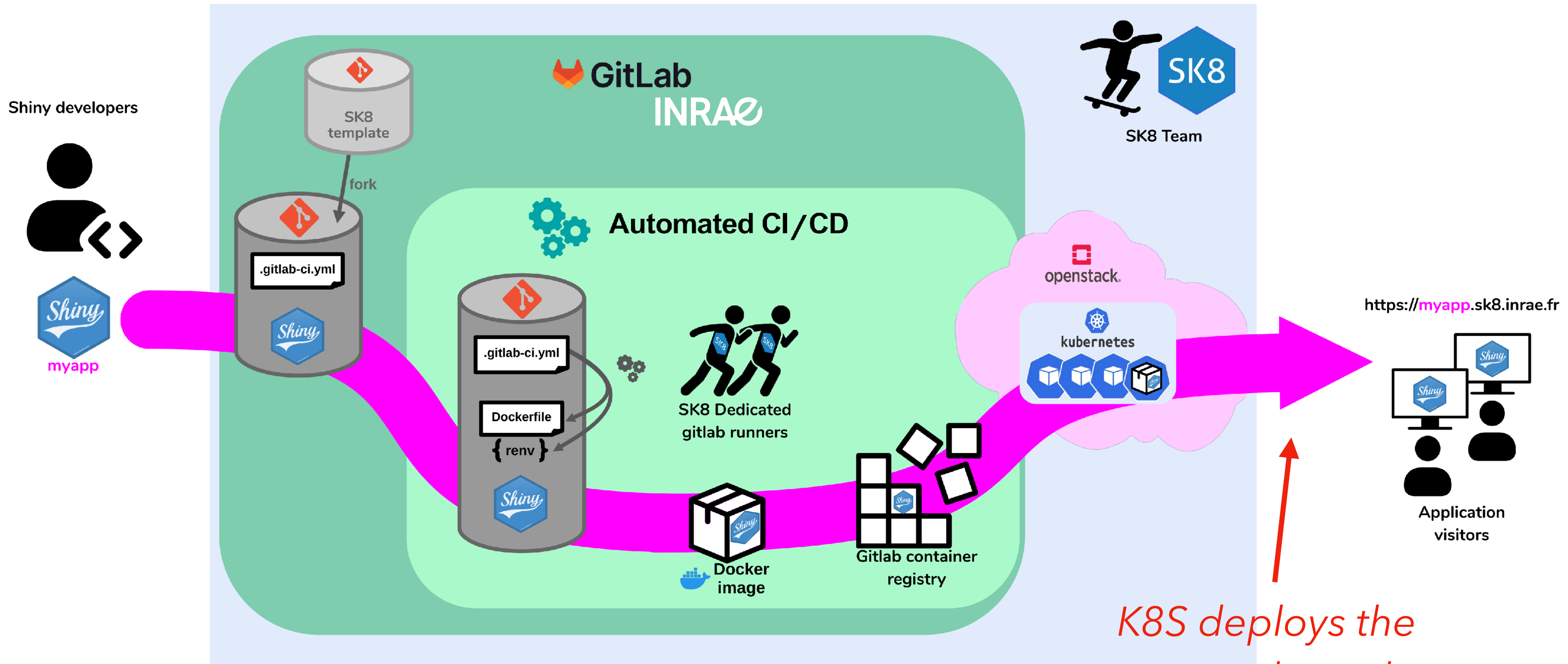


➤ Smoothing the ride 🧠💡



CI/CD : {renv} + {pak}
= Dockerfile

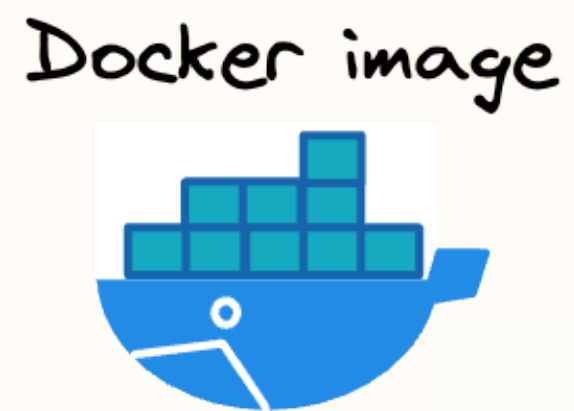
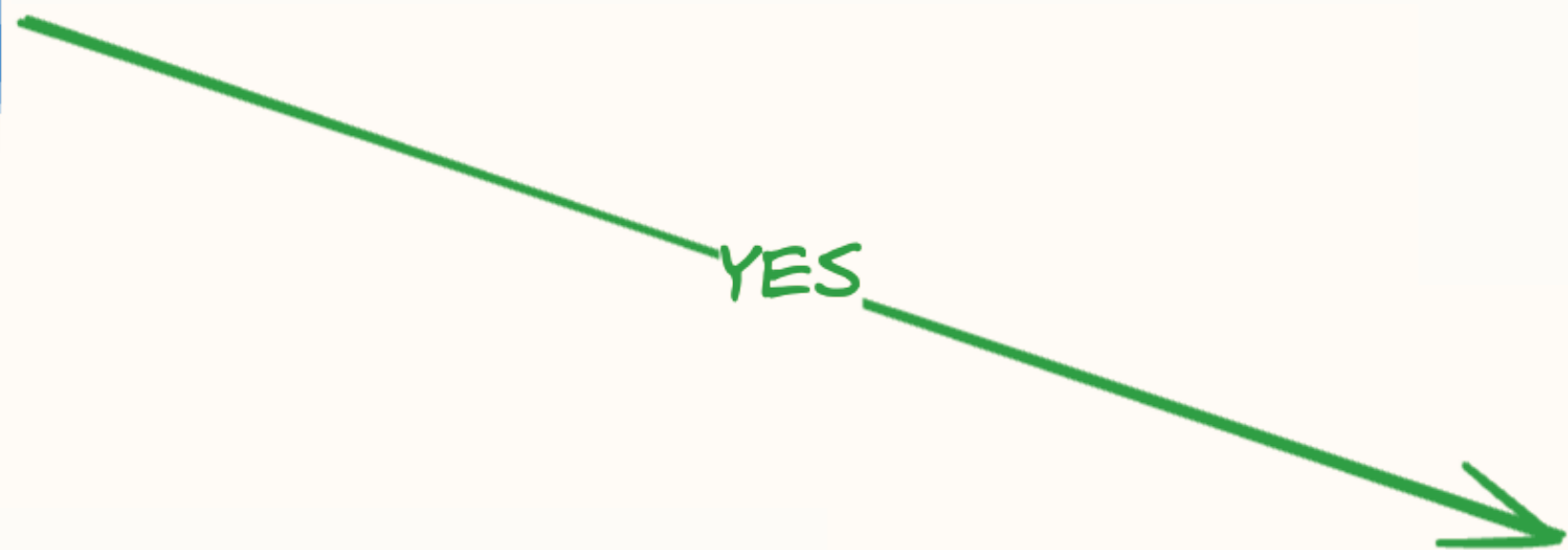
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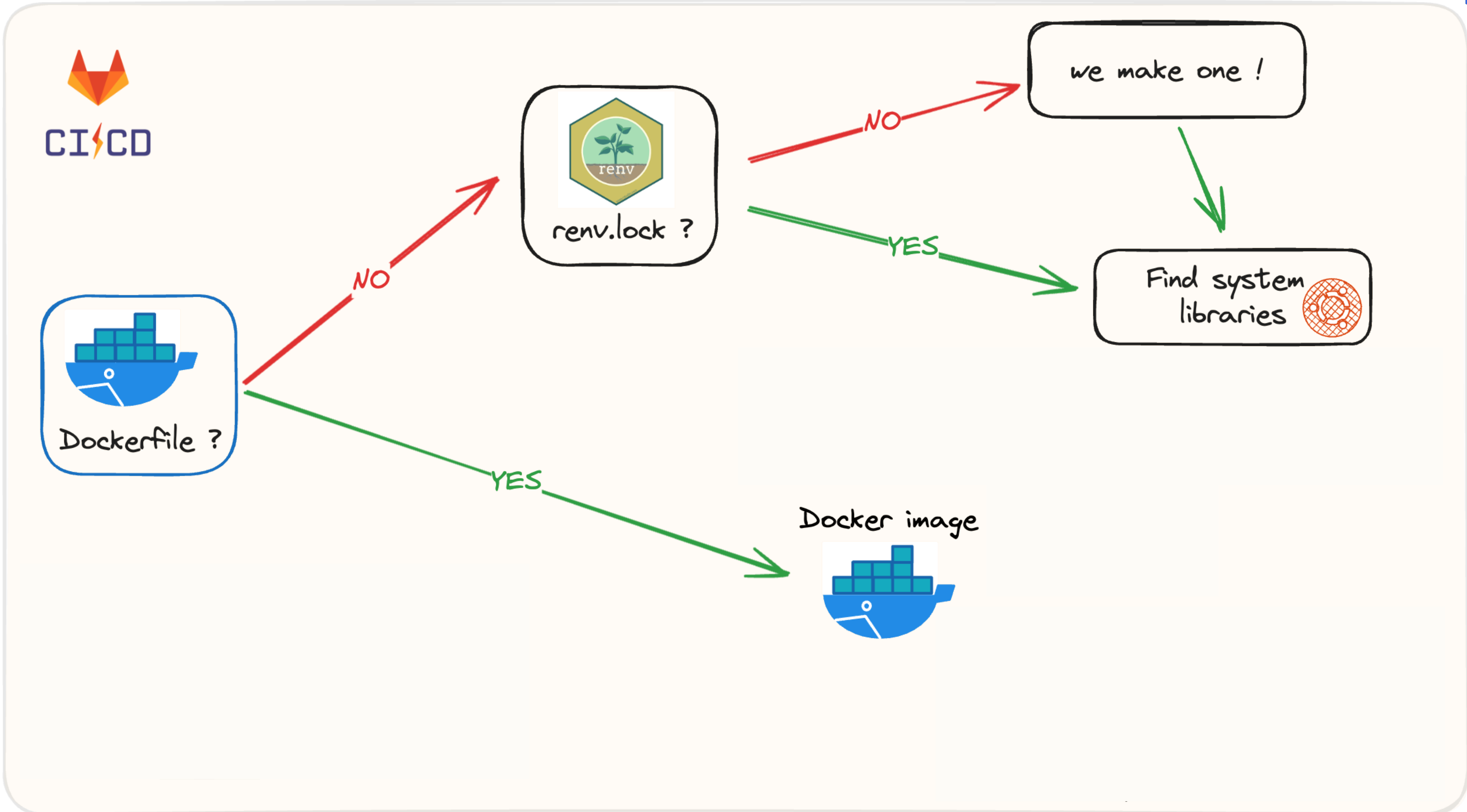
K8S deploys the app to the web



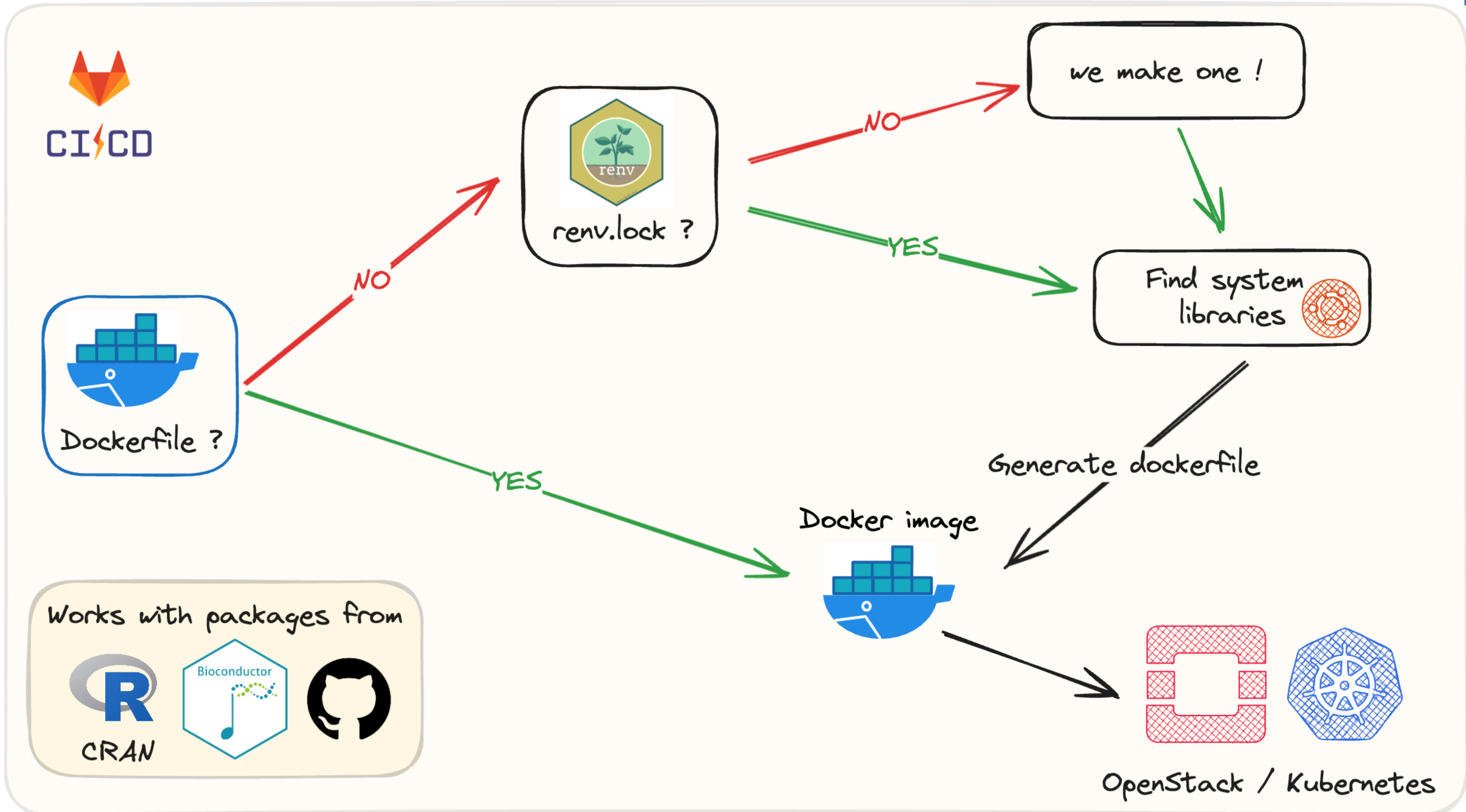
➤ Under the Deck: The Power of SK8Tools



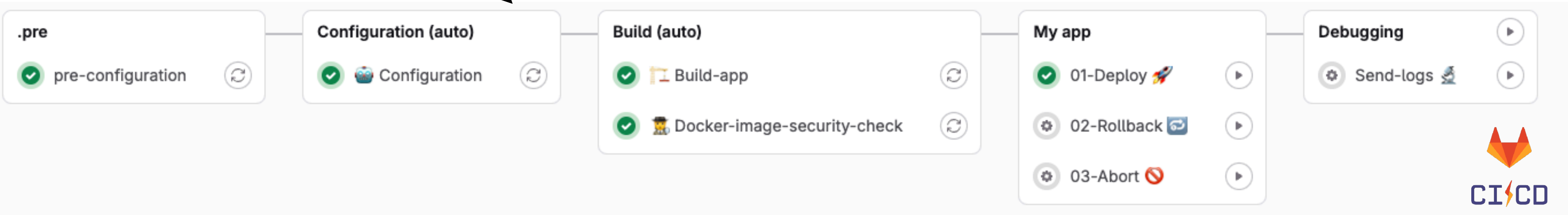
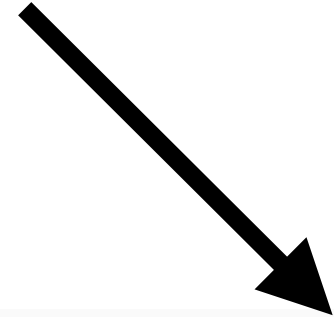
Under the Deck: The Power of SK8Tools



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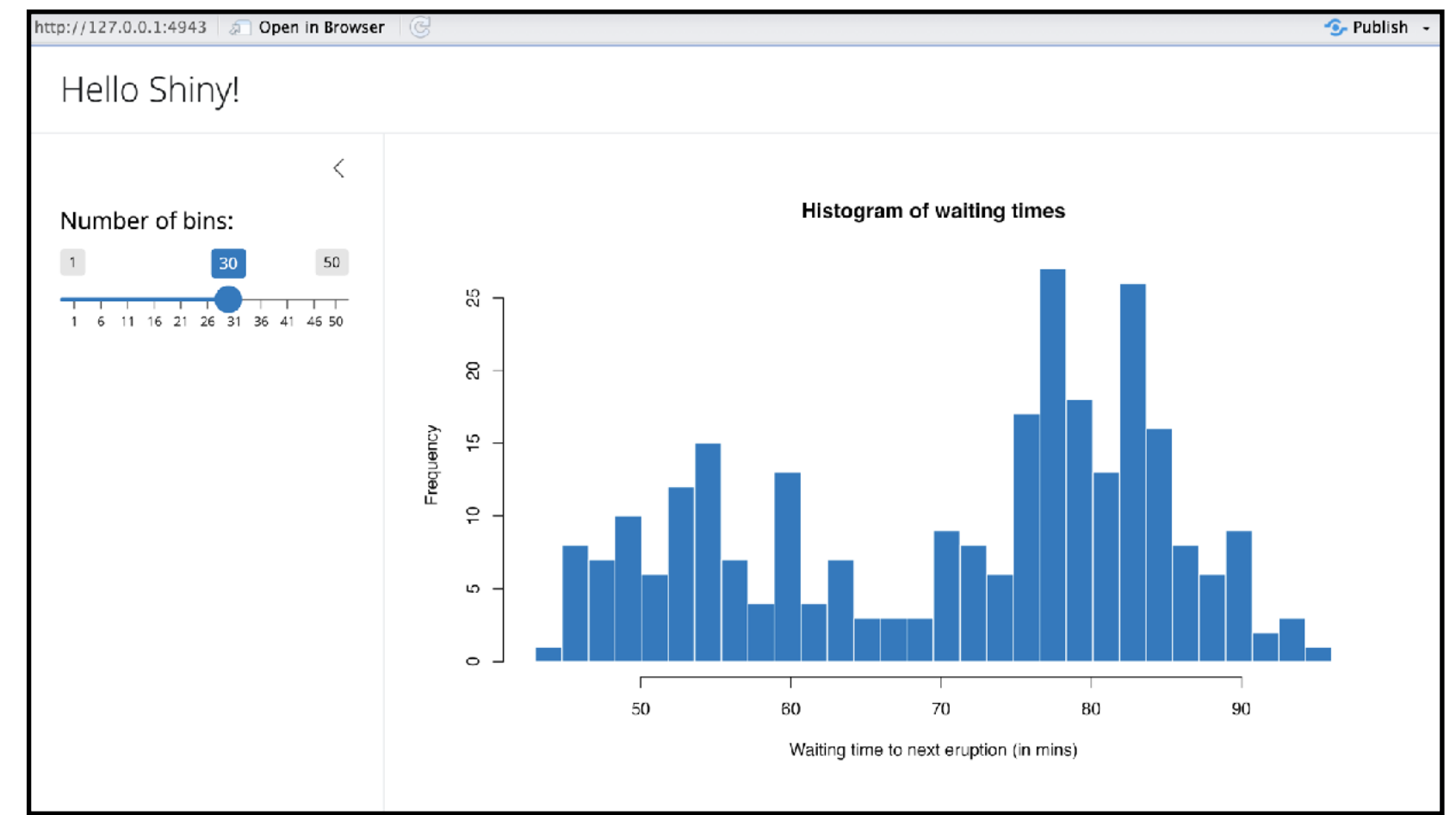
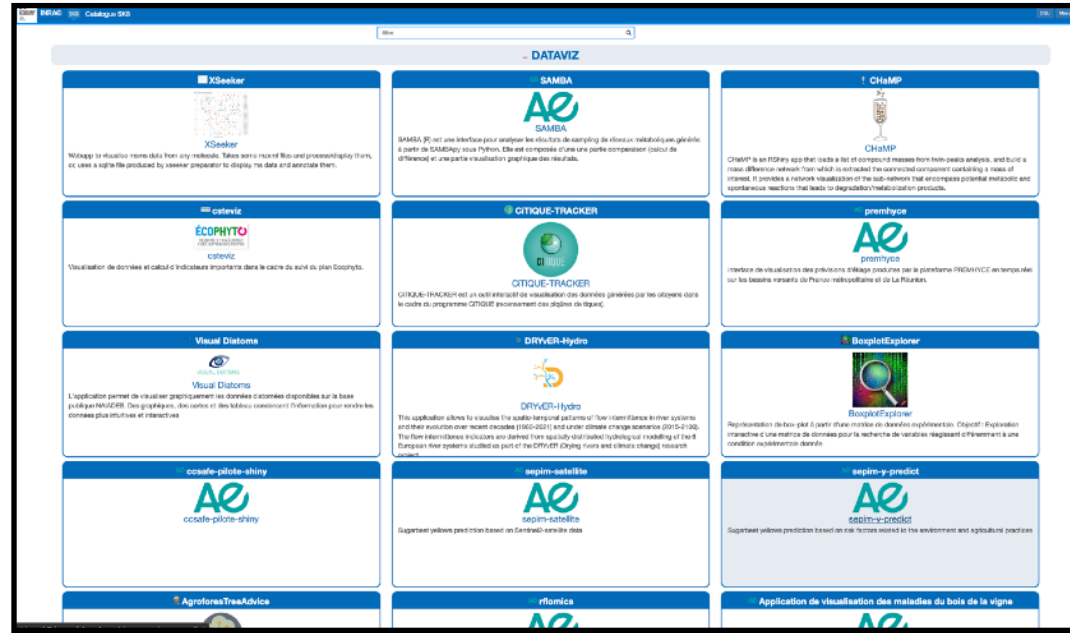
➤ From the user POV



Gitlab automated CI/CD pipeline

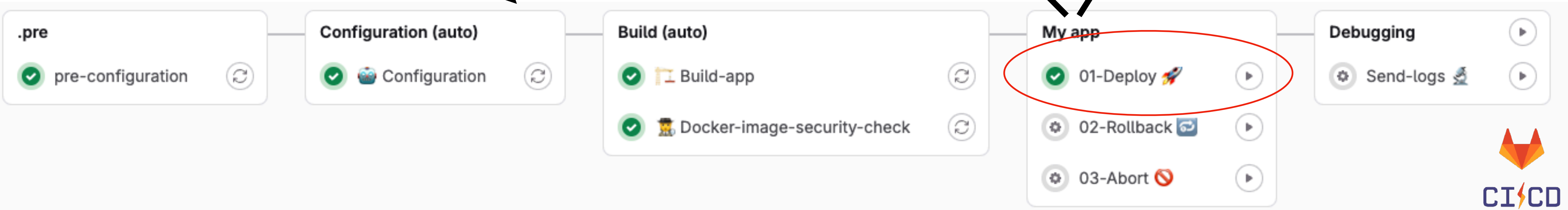


➤ From the user POV



ShinyProxy catalog
shiny.sk8.inrae.fr

<https://myapp.sk8.inrae.fr>



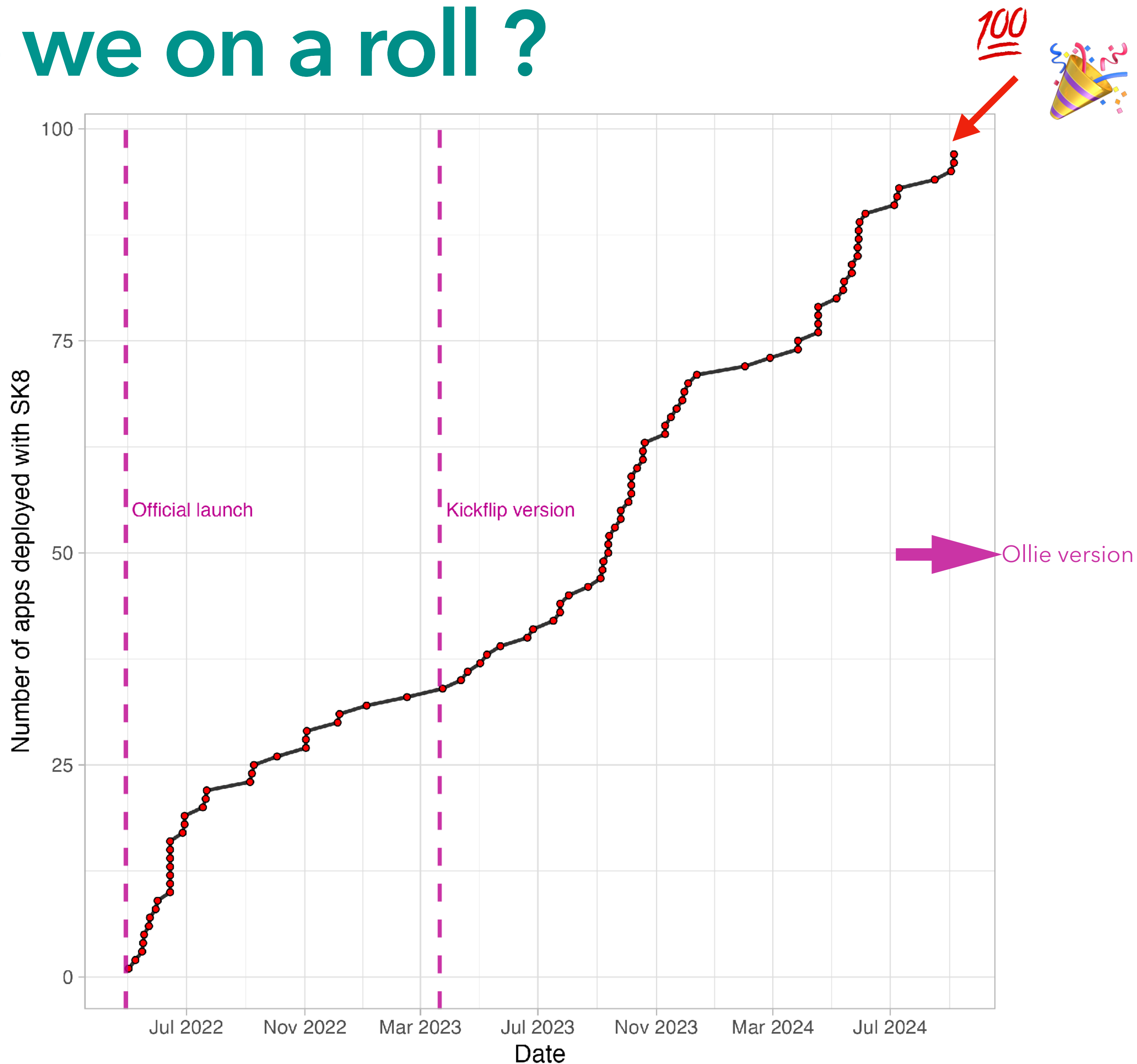
Gitlab automated CI/CD pipeline



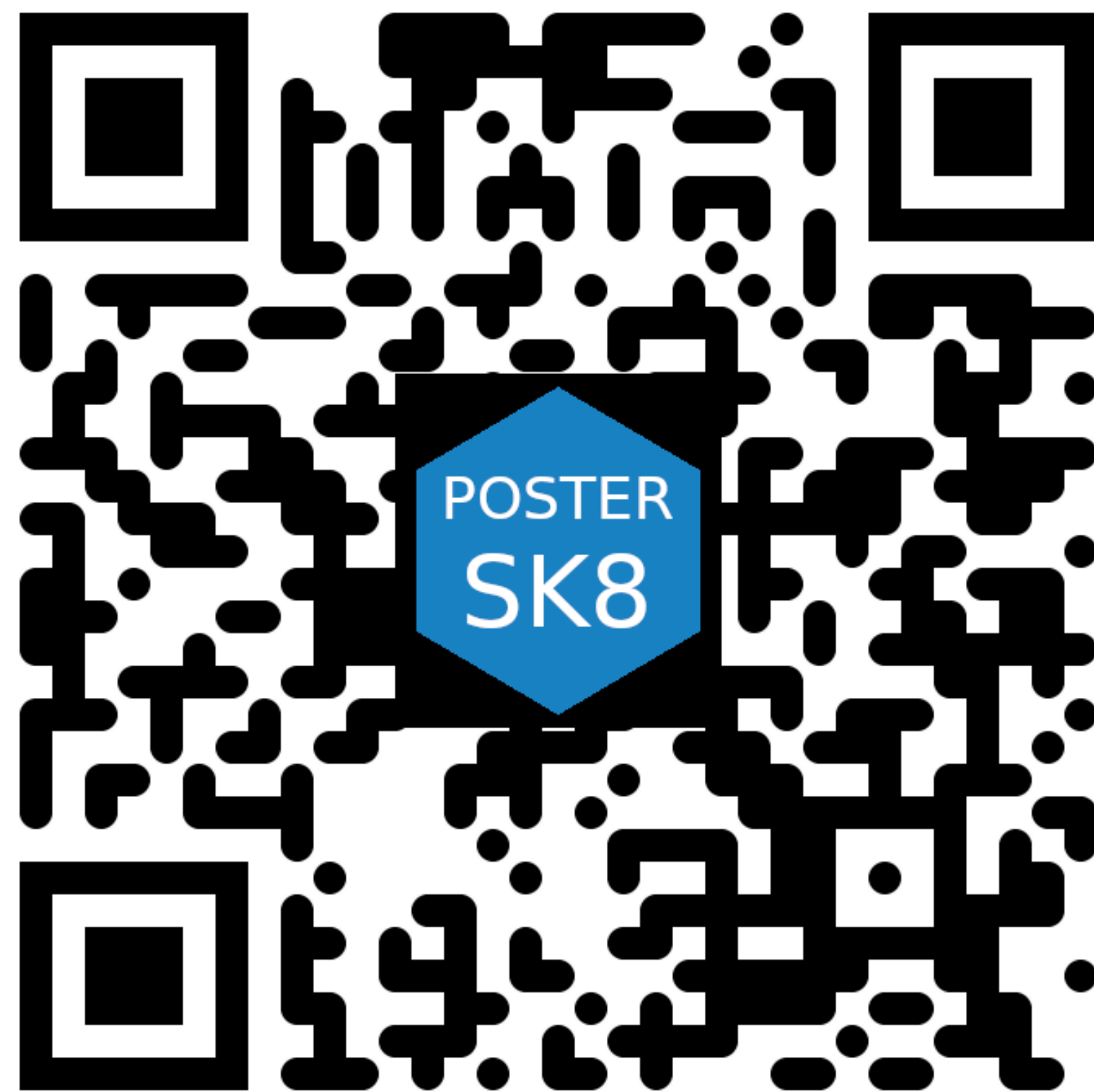
➤ The SK8 project : Are we on a roll ?



LOVIN'



➤ Thank you !



↑ Learn more about SK8 with our English Poster ↑

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