



# 126.7MHz



The Official Newsletter of the Flight Deck

## The End of a Term

**Allen Liu, Prabhnoor Singh, Vikram Sudhagar, Winston Leung**

The days are getting shorter, which signifies the closing of Summer, and our co-op term coming to an end. We are attending the last of our standups, the last of our pull requests, the last of our code reviews.

It's hard to believe that in just a few days we'll be saying our goodbyes, packing up our stuff, and leaving the team. And in just a few weeks we're back at school. From here to there, it's going to be a tough transition.

We had all hoped for a wonderful term, and are glad to say it that it has been that and so much more. Learning from Maintainer and watching it grow has been so rewarding. A huge thanks to everybody who helped make this experience so unforgettable!



## New to the Team

**Connor Rogerson, Full Stack Developer**

I have recently joined the flight deck team.

I joined the RCAF four years ago for the pilot trade. In those past four years I have been completing my degree in Software Engineering at University of Calgary. Over the summers I would complete military training courses and then return to school in the fall. Upon graduating in May of 2022, I was put on the Basic Training List where one gets sent to work in a unit, while waiting to be loaded onto a trade training course. I have been fortunate enough to join the Flight Deck team for my On Job Experience position.

I look forward to working with the team on the Maintainer App, learning more and putting my degree towards something with on job experience.

# Bitcoin is down

**Vikram Sudhagar, Full Stack Developer**

In July 2022, Bitcoin reached one of its lowest dips at a price of about \$20108.53 per Bitcoin. Just recently in November 2021, Bitcoin exceeded over \$65,000 so this gradual drop to \$20,000 was shocking to some people. But why did this happen? The Federal Reserve System says that it was due to the inflation in the US that has not been seen in the past four decades (Forbes). Inflation has caused drastic changes for many cryptocurrencies causing the cryptocurrency market capitalization to fall below \$960 Billion.



Coming back to Bitcoin, another reason why the value has gone down is due to its lessened demand. When the Federal Reserve increased its interest rates, it lessened the demand for cryptocurrencies growth.

*Information taken from: <https://www.forbes.com/advisor/investing/cryptocurrency/why-is-bitcoins-price-falling/>*

# Canada's Inflation Rate Eases to 7.6% in July 2022

**Ali Saoud, Team Lead**

Canada's annual inflation rate was at 7.6% in July of 2022, easing from the 39-year high of 8.1% hit in the prior month and in line with market estimates.

Transportation costs grew at a much slower pace (14.4% vs 16.8% in June), amid a sharp retreat in gasoline (35.6% vs 54.6%). Also, inflation was lower for shelter (7% vs 7.1%), household operations, furnishings, and equipment (5% vs 5.6%), and clothing and footwear (1.4% vs 2.7%).

In the meantime, inflation continued to pick up for food (9.2% vs 8.8%), weighed by groceries (9.9% vs 9.4%), while recreation costs stagnated (at 6.2%). Excluding gasoline, the CPI rose by 6.6% annually. On a monthly basis, consumer prices edged 0.1% higher, the slowest rise since December 2021.



# Tech's Corner: Controller Testing

Winston Leung, Full Stack Developer

Last issue we had Ali cover the MVC pattern - the model, view, and controller. The controller is a busy layer, but to reiterate simply, it handles the requests and responses. This article will delve into one of the many ways to perform automated tests on the controller's responses in a general sense.

This method begins with the test program launching a mocked instance of the app, plus doing any additional setup that would be relevant to the test. This could include routing, sessions, a database, and fake data to go into the database, a test user for example.

There would then be suite of test functions, each targeting a certain segment of the controller. A test function primarily contains a request that it executes, before checking if the response matches the desired outcome. Any setup that is test-specific and not used suite-wide may also go here, like objects that the request will update or delete. It is also worth considering testing for errors where they should appear, not just for the usual OK statuses.

After these test functions run, the last step is the teardown. At this stage, all mocked data is wiped from the database, and the app is shut down.

## Inspection Templates

Prabhnoor Singh, Full Stack Developer

Template Inspections are designed to allow planners to create inspections in Maintainer on their own. The current way of doing this is through an excel spreadsheet with VBA/macros. This method is not very user-friendly. So we want to add this functionality in Maintainer.

We are using a similar controller/repo/route/models structure to the inspections that already exists. We wanted to maximize user friendliness by only using fields that are relevant to creating and using templates. We also used some of the HTML code from the inspection HTML templates such as the settings, tasks, and milestones page.

Getting feedback from the planners and higher ups, one can conclude they are satisfied with Maintainer and would like to see it be the central app for all aircraft maintenance operations. Incorporating inspection templates into the app so that the user need not leave Maintainer and use another program is a major step in the right direction of achieving this goal.

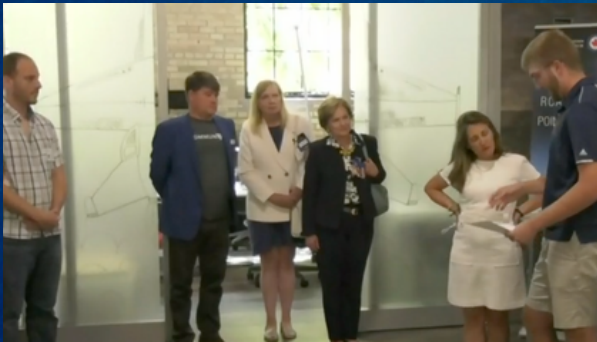


# A Surprise Visit

**Allen Liu, Full Stack Developer**

This month, we had a surprise special visitor to the Flight Deck office in Waterloo. Deputy Prime Minister Chrystia Freeland made a stop at Communitech - the innovation hub that the Flight Deck is based out of - to meet with stakeholders in the tech industry to discuss the future of tech and how the industry is navigating its way out of the pandemic.

While on a tour of building, Freeland made some time for a stop at the Flight Deck's office where she took a job at flying an F-14 on our flight simulator. It was great getting to show off some of the cool work that we've been doing! Special shoutout to Jonathan Loos and Chris Young for representing our team!



## Red Team, Blue Team



**Winston Leung, Full Stack Developer**

Over the past term the team has been meeting for our weekly Codenames games, a game where the red team and the blue team each try to guess all their assigned words based on clues given by their spymaster.

It certainly brought out our competitive side as the weeks went by. Funny to think that a little game like this could become so intense, but that's what made these so entertaining.

Now I didn't keep track but I'm pretty confident that the red team won the most games this term. Perhaps the blue team will have better luck next time.

Jokes aside, these sessions where we would have a little banter were just a great time to have fun with everybody else, and were always a part of the highlights of the week. I hope everyone continues to enjoy playing the game with the team as we did, and go red team!

"These things are fun, and fun is good."



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