

DMW101 DMeta SuperApp

– A Novel Collaborative Full Stack Architecture based on Reverse React Notation

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- https://github.com/godmeta/doc/blob/main/DMW101_DMeta_SuperApp.pdf
- DMeta is the first word of the recursive acronym DMeta Decentralixed Metaverse. Decentralixed is spelled with 'x' as a solution to the long standing British or American spelling dilemma, as well as to differentiate our platform from other similarly named entities.
- <https://en.wikipedia.org/wiki/Super-app>

A **super-app** (also written as **super app** or **superapp**) is a [mobile](#) or [web application](#) that can provide multiple services including [payment](#) and [financial transaction](#) processing, effectively becoming an all-encompassing self-contained commerce and communication [online platform](#) that embraces many aspects of personal and commercial life. Notable examples of super-apps include [Tencent's WeChat](#) in China, and [Grab](#) in Southeast Asia.

In this article, we demonstrate how tunnel redirection can be done using React Native on Android devices, simplified using Reverse React Notation, a metaprogramming script based on reverse polish notation, derived from FORTH and its variant Phoscript.

DAR001 is the first in a series of DMeta App using Reverse React Notation (hence DAR), a long planned tutorial series on full stack app development, aimed at educating and helping beginners as well as senior programmers, on the benefits of metaprogramming, that quite literally enables programmers to write code collaboratively "one word at a time" ("word" means function name in FORTH), across diverse environments, with different programming languages.

32 bit Intel 80386 Microprocessor & Linux

If we were to identify one computer architecture and one operating system which have the greatest influences in shaping the computing industry in 2020s, it would have to be Intel 80386 microprocessor and Linux that was conceived in 1991.

Despite the many great achievements of Intel microprocessors and Linux, they are not without flaws which rarely receive public attention.

The rising hype of "SuperApp" as highlighted by a recent New York magazine article just exposed some of these.

- <https://nymag.com/intelligencer/2021/11/facebook-metaverse-super-apps.html>

The fundamental questions that we must now reexamine are:

- What is an App? Or simply, what is a program?
- In relation to the previous question, what is an operating system?

Instead of taking an “academic” approach to address these questions with pages upon pages of theories, we would like to draw our readers’ attention to DAR001 DMeta App using React Reverse Notation, which ends with an example of two lines of code:

```
f('http://godmeta.github.io/dmeta.json')
alert("Required Field Is Missing!!! RRN "+r('awa: fetch: je:'));
```

Without looking at DAR001, how many of our esteemed readers would have guessed that these two lines of code performed something fairly complex as follow:

- The code runs in react-native on an Android device.
- It opens a json file hosted on a github page, to return the address of a MySQL server behind an ngrok tunnel.
- It uses asynchronous function fetch() and simplifies the nightmarish JavaScript asynchronous syntax to unassuming Reverse React Notation as shown above.
- DAR001 DMeta App RRN Tunnel Redirection
 - <https://docs.google.com/document/d/13OraMz9NLU4Uf9-Kso-OHbAwbzdJq3S-lse0r98N1u4/edit?usp=sharing>
 - https://github.com/godmeta/doc/blob/main/DAR001_DMeta_App_RRN_Tunnel_Redirection.pdf

Next, consider Jitsi Meet, a Zoom clone that is completely open source, which means anyone may download and modify it:

- <https://github.com/jitsi/jitsi-meet>

What can DMeta do to turn Jitsi Meet into a SuperApp?

At this point, our readers may find it more believable that we are able to create a SuperApp, a Clubhouse plus Twitter plus Google Sheets all in one?

Here are two demo videos of what DMeta plans to do:

- DMeta Contract
 - <https://www.youtube.com/watch?v=jOByr4L2zDM>
- DMetaPay International Money Transfer Demo video
 - <https://youtu.be/3rRPAIN-KZ0>
- DMeta Summary Apr 2022
 - <https://docs.google.com/document/d/10knBIHMHtcrRQUAhwuzYsfbjJuhlWP84R9vkwTVExws/edit>
 - https://github.com/godmeta/doc/blob/main/DMW102_DMeta_Summary_Apr_2022.pdf

Based on the above items, our tasks in DMeta SuperApp are:

- Port DMeta messaging functions in DMeta Server to DMeta Mobile App
 - 1 man month
- Unify the above with DMeta Contract and DMetaPay
 - 1 man month
- Merge DMeta SuperApp with Jitsi Meet
 - 1 man month

We estimate 3 man months are required to produce the first prototype for DMeta SuperApp.

However, since we do not have funding for full time developers at the moment, we are employing Fibonacci Flipped Classroom (FFC) method to recruit programmers. FFC could be the ultimate "make investors go after programmers" start-up funding model.

First Round Investment Dilemma

The first round of funding is always a Catch 22 or a chicken or egg dilemma. Flipped Classroom is a teaching method reputedly originating from the Soviet Union and named by an American educator for shifting the workload to students, in contrast to conventional teaching method, hence the name. When the Flipped Classroom teaching method is applied to social media, at least in theory, a blog post or a video may go viral, inspiring at least one viewer to do the same, with its network growth mimicking the Fibonacci series. Hence the name Fibonacci Flipped Classroom.

There have been silly acts such as bucket ice challenge, passing toilet rolls, and lying flat videos that match the criteria for Fibonacci Flipped Classroom in the past, except that they are not sustainable due to the lack of regenerative values (no net gains, only net costs). Nevertheless, they have demonstrated, at least partially, Fibonacci Flipped Classroom is possible.

In order for Fibonacci Flipped Classroom to succeed, the contents of the first blog post or video are critical. We have identified the following candidates:

- A. A video of a non-Chinese person reciting the Chinese multiplication table
- B. DMetaPay International Money Transfer
- C. RRR2 (Reverse React Notation on React Native)
- D. Fibonacci function in FORTH

A. A video of a non-Chinese person reciting the Chinese multiplication table

Besides viral elements (unlikely people doing unlikely things), the cognitive challenge in reciting Chinese multiplication table is only the ability to remember 10 Chinese numbers and their pronunciations. The next closest challenge to non-Chinese speakers would be:

- Hare Krishna (4 syllables) (6 syllables fewer than 10 Chinese numbers)
- Nam-myoho-renge-kyo (6 syllables, 7 Chinese characters) (4 syllables fewer than 10 Chinese numbers)
- (Short Arabic phrases may offend political sensitivities.)

At the end of the recitation of Chinese multiplication table, one may continue with the following rap, like an elevator pitch to promote business:



这个 XX 不简单
Zhe4 ge4 da4 ye2 bu4 jian3 dan
This XX is extraordinary

XX 会念乘法表
Da4 ye2 hui4 nian4 cheng2 fa biao3
XX knows reciting multiplication table

要做生意找 XX
Yao4 zuo4 sheng yi4 zhao 3 da4 ye2
If you want to do business, look for XX

我们一起发大财
Wo3 men2 yi qi3 fa da4 cai
Let us make big fortune together

In conclusion, this demo video would be a very useful pitch to prove that one is worthy of doing business with.

This video will help DMeta to establish itself as an education and training platform for learning languages, mathematics etc.

B. DMetaPay International Money Transfer

DMetaPay is the cheapest and most flexible way of sending money around the world, using both cryptocurrencies and national currencies.

Based on DMeta Contract, users of DMetaPay do not need to go through the hassles of user registration, as public key, private key and their hashes are generated upon request, and used as security tokens for fund transfer.

DMetaPay opens up the biggest loan markets in the world – small loans around USD100 in developing countries – and connects them with the biggest pool of hot funds in the world – owners of cryptocurrencies. The overnight profit margin for a chef in a developing country can be as high as 50%. This means millions of chefs in developing countries can use a loan of USD100 and pay overnight interest rates up to 50%!! DMetaPay is the ONLY solution that can make this happen, NOW, not one or five years later!!

DMetaPay users may create short videos (1 to 5 minutes) showing all sorts of creative and interesting applications for DMetaPay, from paying an Instagram model to dance in bikinis to paying a tutor on videography who lives on the other side of the world.

If we claim that DMeta and DMetaPay aim to make 0.1% of MAGA (Microsoft Amazon Google Apple) revenues in 5 years time, would YOU, our readers, agree that this is achievable? If so, then DMeta might be the next biggest company to invest in after Facebook.

C. RRN2 (Reverse React Notation on React Native = RRNRN = RRN2)

Based on the two examples above (Chinese multiplication demo videos and DMetaPay), we believe we have some very compelling reasons to convince our readers that DMeta is not just interesting but hugely profitable.

So here comes the real bottleneck – development of DMeta SuperApp: How we may use Fibonacci Flipped Classroom to break the development bottleneck and funding dilemma?

Example DAR001 shows Reverse React Notation calling React Native fetch() to obtain the address of MySQL server behind an ngrok tunnel. Based on the principles of Flipped Classroom, a student, or learner, may write a related function, e.g. user authentication, retrieving database records etc, using RRN2. Each of these blog posts may be up to 5 pages or made into 5 minute videos. Each of these blog posts and videos may in turn be viewed by at least 100 readers (the lowest number in any popular social media forums) and hopefully inspire at least 1 reader to continue to work on RRN2.

So the critical parameters in the Fibonacci Flipped Classroom model are:

- A. Difficulty or time taken to write a new RRN2 function or word (FORTH term for function);
- B. The number of viewers;
- C. The number of developers joining DMeta, writing RRN2 functions;
- D. The quality of the videos or blog posts produced.
- E. Time needed to publish a new blog post or video

In theory, these factors are interrelated:

- I. Average value of A may be reduced when C increases.
- II. B increases when C increases.
- III. C increases when B increases.
- IV. D increases when C increases.
- V. B increases when D increases.
- VI. E decreases as C increases.
- VII. B increases as E decreases.

So the next critical questions are:

- I. When can we get the accumulative 3 man months to complete the prototype of DMeta SuperApp?
- II. How many developers do we need to achieve (I)?
- III. Will we get investors to fund full time or part time programmers before (I)?
- IV. How many developers (voluntary) can DMeta recruit every month?
- V. Can DMeta achieve profitability WITHOUT investors?

The consideration that DMeta may grow WITHOUT investors is not to eliminate the possibilities of working with investors' funds, but to maximise DMeta current members and agents' value in shares, in the event we negotiate with investors.

In plain English, we get the best deals when we can afford to walk away.

Concluding Remarks

- The difference now is that we *can* see the super-apps coming. In Asia, they're already here. As consumers, investors, and political leaders, we have a chance to do better. To set the stage for competition and empowerment, not co-option and enragement.

The concluding remarks in the New York Magazine article, diplomatically speaking, glossed over many hidden ugly truths, yet again pretending the Western Christendom to be the one true vanguard of humanity. While, we may also gloss over its political correctness, we wish to highlight our approach as the THIRD WAY, the People's Way, *Opera Populi*.

- The original free software movement spearheaded by Free Software Foundation and Linux operating system have created a multi trillion dollar industry, enabling our readers to read this article on affordable mobile devices anywhere in the world.

However, the free software licenses that are in popular use today have many shortcomings, creating an unfair playground where shareholders of trillion dollar corporations such as MAGA (Microsoft Amazon Google Apple) pocket billions of dollars in dividends and shares, while free software programmers who contributed code directly or indirectly used by these trillion dollar corporations have not been fairly compensated.

DMeta Decentralised Metaverse attempts to solve these problems at many different levels:

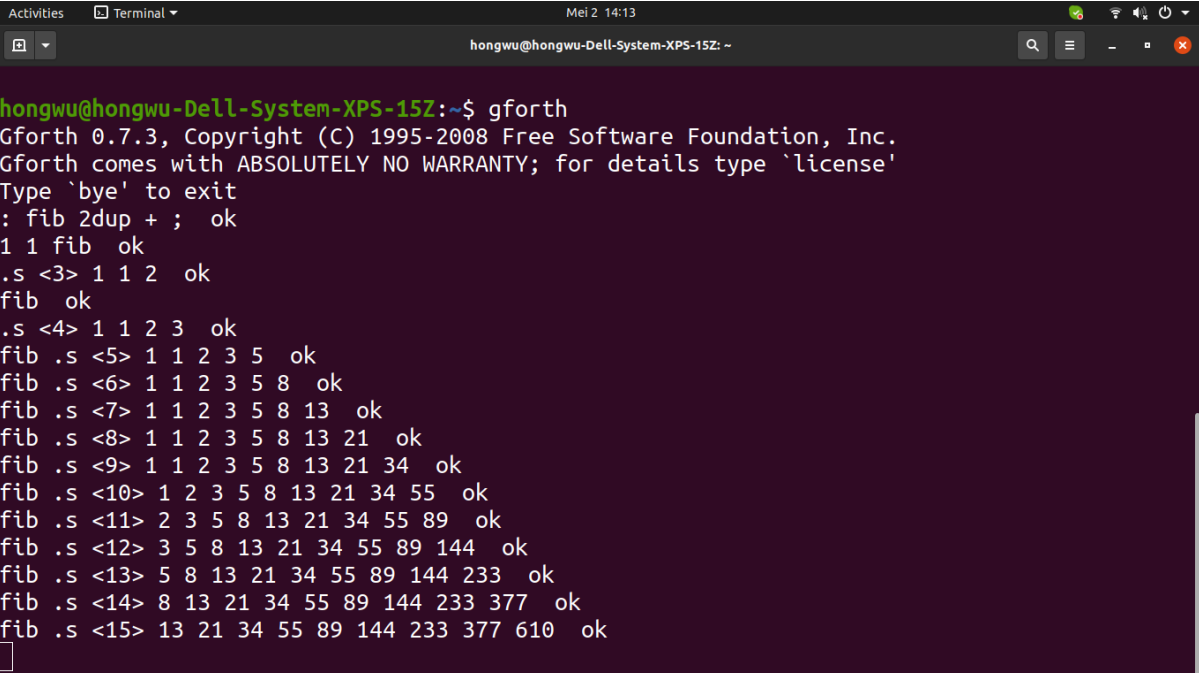
- I. User login using public key.
- II. Submegabyte server footprint to enable user hosting servers.
- III. Users directly negotiate with advertisers for advertising fees.
- IV. Affiliate marketing using hash to identify users and recommendations.
- V. Programmers use hash to identify code at function level, gaining greater control while negotiating with investors.
- VI. Hash of Phoscript Code allows portability of algorithms across multiple programming languages.
- VII. Fibonacci Flipped Classroom is used to recruit programmers while negotiating with investors to maximise share values.

Appendix

- D. Fibonacci function in FORTH

We are adding the fourth (pun intended!!) Fibonacci Flipped Classroom example, which is Fibonacci function in FORTH programming language as an appendix:

- <https://github.com/xtuc/Fibonacci-forth>



```
hongwu@hongwu-Dell-System-XPS-15Z: ~  
$ gforth  
Gforth 0.7.3, Copyright (C) 1995-2008 Free Software Foundation, Inc.  
Gforth comes with ABSOLUTELY NO WARRANTY; for details type `license'  
Type `bye' to exit  
: fib 2dup + ; ok  
1 1 fib ok  
.s <3> 1 1 2 ok  
fib ok  
.s <4> 1 1 2 3 ok  
fib .s <5> 1 1 2 3 5 ok  
fib .s <6> 1 1 2 3 5 8 ok  
fib .s <7> 1 1 2 3 5 8 13 ok  
fib .s <8> 1 1 2 3 5 8 13 21 ok  
fib .s <9> 1 1 2 3 5 8 13 21 34 ok  
fib .s <10> 1 2 3 5 8 13 21 34 55 ok  
fib .s <11> 2 3 5 8 13 21 34 55 89 ok  
fib .s <12> 3 5 8 13 21 34 55 89 144 ok  
fib .s <13> 5 8 13 21 34 55 89 144 233 ok  
fib .s <14> 8 13 21 34 55 89 144 233 377 ok  
fib .s <15> 13 21 34 55 89 144 233 377 610 ok
```

Each programmer can talk about their vision and impression in the video, as Fibonacci function is such a fundamental function that everyone must have a story to tell.