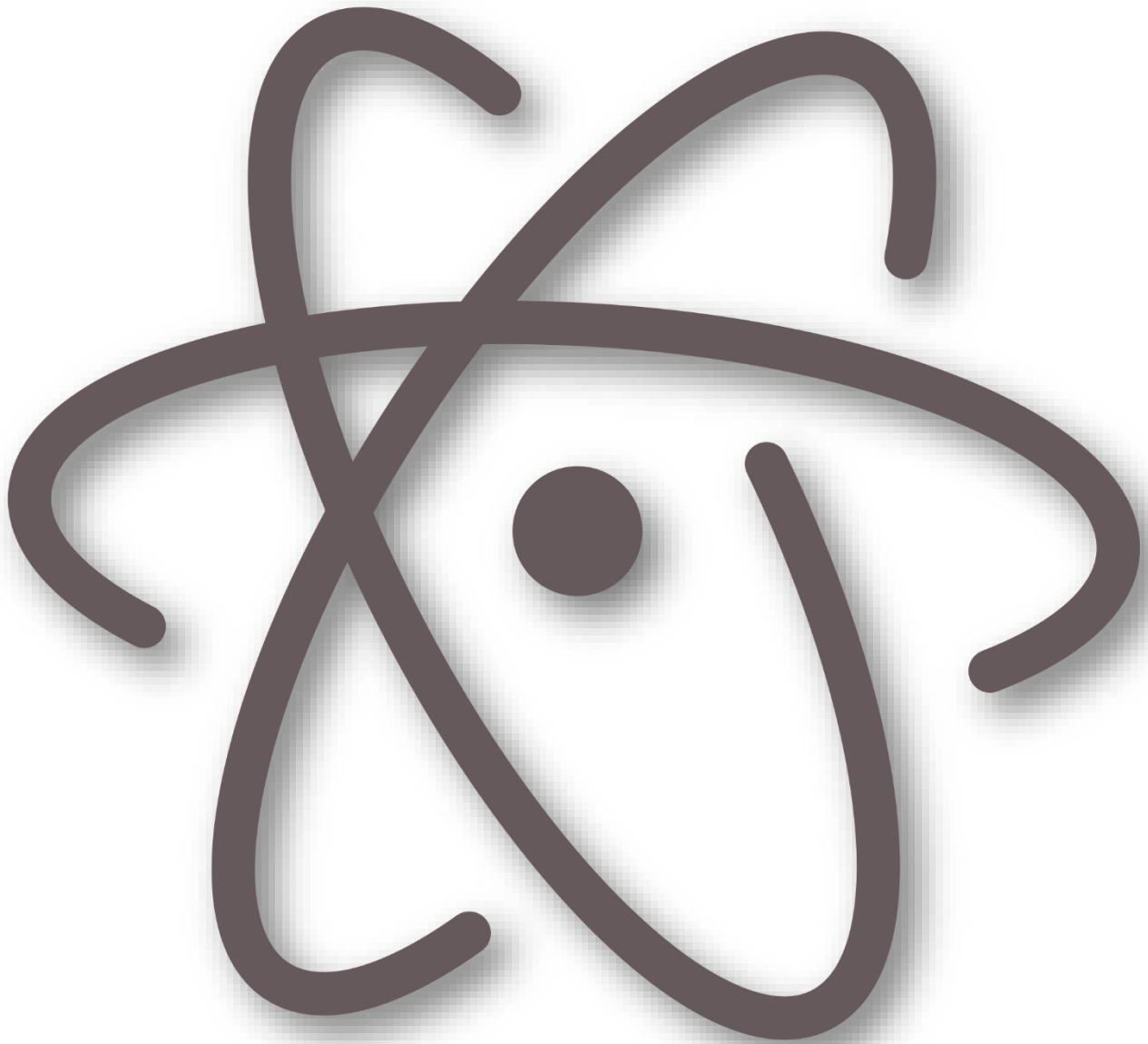


Atom and Teletype As An Alternative For Team Programming

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Section 1: Overview

With the creation and popularization of the internet, the development team is no longer in a single location or office, which has prompted the creation of tools to allow the capability to view and visually share information to a team of people in real time. The two types of team sharing that will be discussed in this report are desktop sharing and peer to peer communication. The main difference between these two forms of team sharing is the security of private information and how the sharing is done. Example of desktop sharing are TeamViewer and Microsoft Remote Desktop, where both of these are similar to Skype in a way where the participants can choose to display their desktop for others to see or even give access to someone to control the other persons desktop. The peer to peer examples are Teletype for Atom, Visual Studio Live Share and Google Docs which are all examples of a peer to peer sharing where a document or code file can be edited real time by multiple people without a persons desktop and data being visible and directly reachable.

Section 2: Desktop Sharing

The concept of Desktop Sharing began when desktops and servers became more complex and often decentralized from the company's office, such as the Cloud, which is a service of constantly running servers. The leading software for sharing/controlling desktops is TeamViewer which works on all major platforms and mobile devices and was founded by a German company. The other major application that will be discussed is Microsoft remote desktop.

Section 2.1: Teamviewer

TeamViewer works by installing the application on the device you want to access and the device you are controlling from. This allows the user to control who access the device my controlling connection profiles by adding them to a list or controlling via an access code.

Section 2.2: Microsoft Remote Desktop

Microsoft Remote Desktop by installing it on the device you want to control then connect via the external ip address and access is granted by knowing the ip address or knowing the login on the other device.

Section 2.3: Skype

The last one to be discussed is Skype which does not give access to other users but does allow other users to watch someone else controlling their device similar to that of a webcam.

Section 2.4: Privacy/Security Concerns

All of these have privacy and security concerns, however TeamViewer and Remote Desktop give access to a computer. Whereas Skype is just visually looking at a computer. The privacy concerns revolve around seeing the entirety of a user's desktop, files and programs. With the remote control applications of another persons desktop the user has access to everything on the other persons device and has CRUD capabilities which means Create, Read, Update and Delete to all on the machine. Another downside is that these options are all one at a time, which works for presentations but not for team development projects

Section 3: Atom and Teletype

Developed by Github, the Atom IDE text editor, is an advanced and light weight editor that allows for numerous languages to be efficiently typed and coded with itellisense which is the ability for the software to suggest/auto complete with code suggestions.

Teletype is an Atom package that allows for peer to peer typing and coding, which allows for teams to work on the same project or even file in real time with other members of their team and see the changes made to a file in real time.

Section 3.1: Downloading Atom

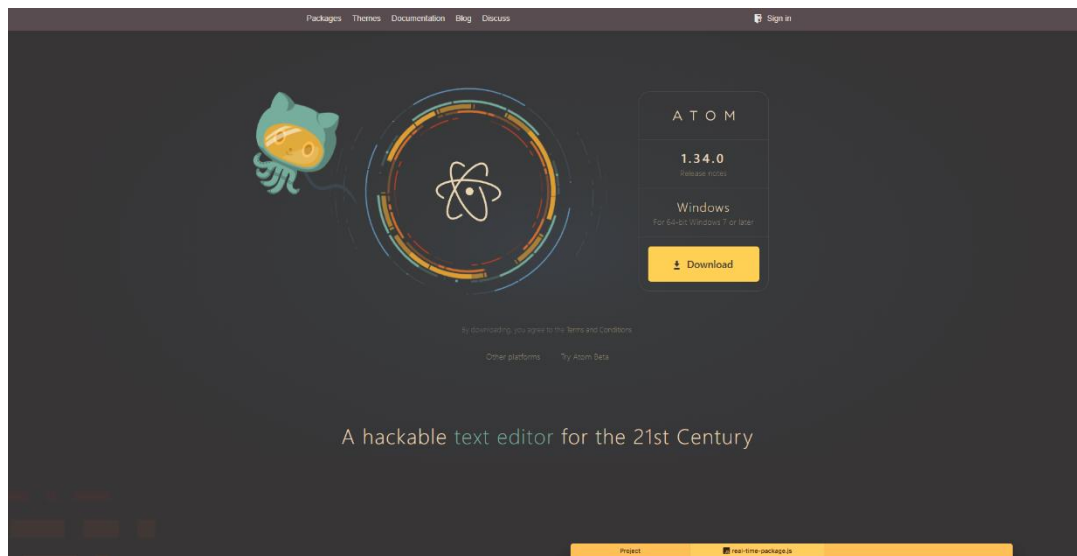


Figure 1 Main Landing Page for Atom

Upon loading the atom text editor website, you are brought to the landing which will auto detect which operating system you are using a place the down load for it in the middle of the page, designated with a yellow button as seen in figure 1.

Once the download button is clicked the download will automatically start, the file will be named "AtomSetup-[insert os or bit size]". Once the download is complete run the installer either an exe on windows or dmg on mac.

Section 3.2: Installing Atom

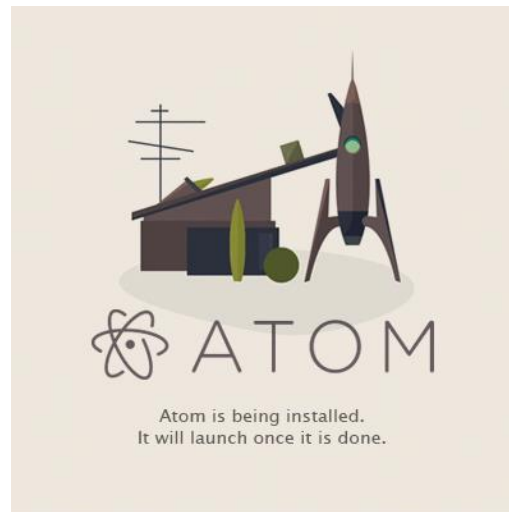


Figure 2 Atom Installer

Upon running the installer, as depicted in figure 2 is brought up. Once the installation is complete atom will automatically start up.

Section 3.3: Installing Teletype

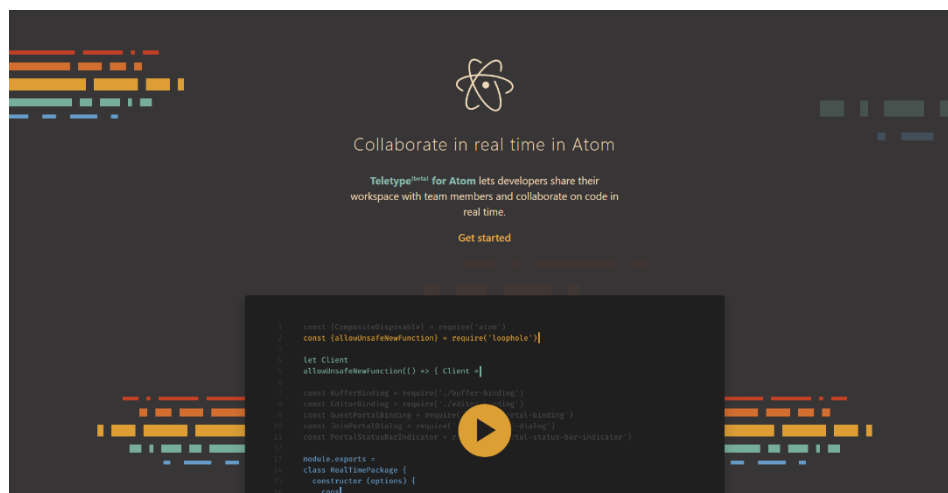


Figure 3 Landing page for teletype for atom website

Upon going to the teletype for atom website, you are brought to the landing page for the application, once there the user can either scroll down to the 'get started' section or click

the yellow text saying 'Get Started' as depicted in figure 3 to be brought to the section as depicted in figure 4.

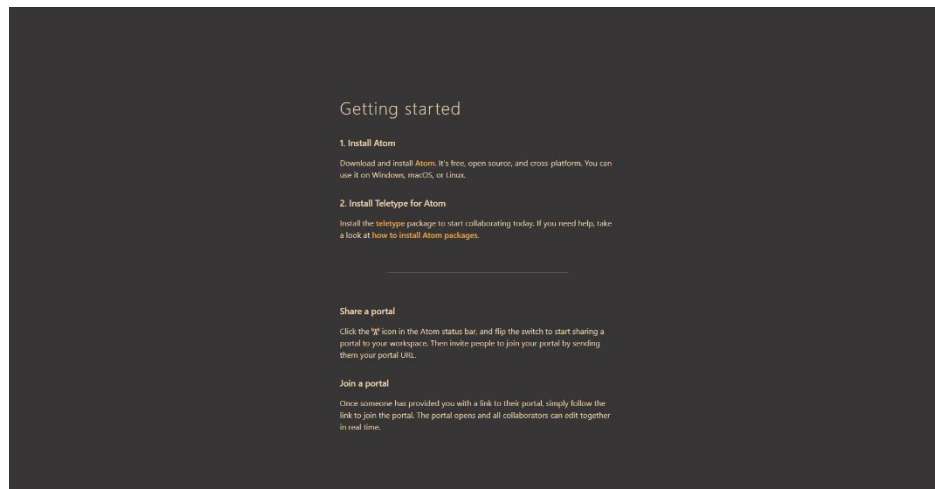


Figure 4 Get Started Section

Step 1 has already been completed in the previous section. Step 2 is to install the teletype package. A package in atom is an extension for the text editor to give it more capabilities than it originally does.

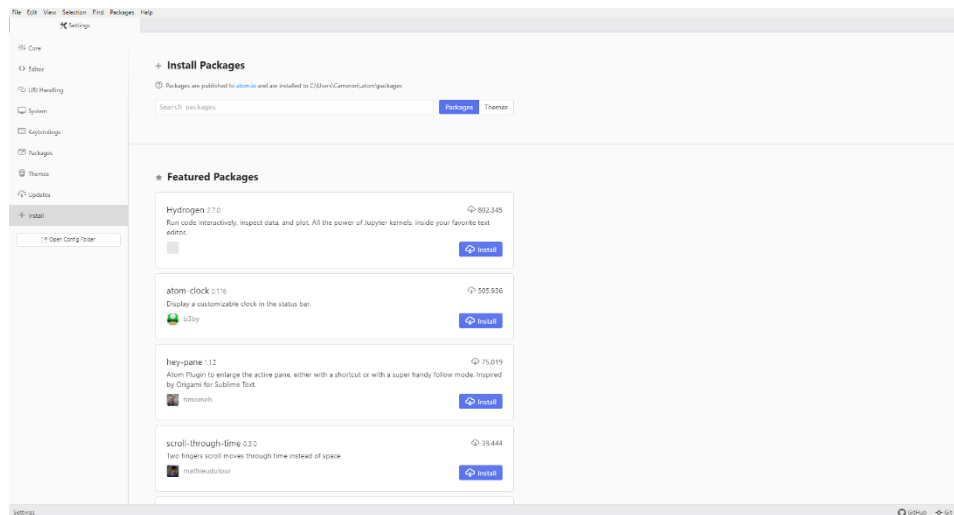


Figure 5 Install Package Screen in Atom

In Atom navigate to the settings page, and select the install tab on the left, as depicted in figure 5. Once on the screen above search for teletype and look for one, should be the first result, by the publisher atom and click install.

Section 3.4: After installing Teletype and Setting up environment

The next steps are to create a github account, github is a source control and code repository service that is widely used in the industry and personal projects. The github account is needed to authenticate you with the atom teletype environment. To get the authentication token for the teletype login, need to go to the teletype website to login and then it is added to the atom text editor. Once the authentication is set up, if you are the host you can create a session and give the link to others, as depicted below in figure 6, once another team member joins you will be able to see their github icon.

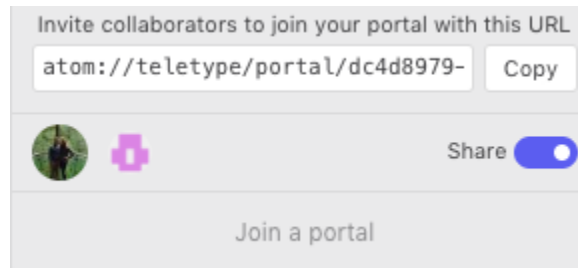


Figure 6 Session members for Teletype session

Section 4: References

["TeamViewer"](#) – Wikipedia Page

["Microsoft Remote Desktop"](#) – Wikipedia Page

["Skype"](#) – Wikipedia Page

["Atom Text Editor"](#) – Wikipedia Page

["Atom Text Editor"](#) – Atom Website by Github

["Teletype for Atom"](#) – Teletype for Atom Website by Github