Ordinality of Documentation By Tier (M - Mandatory, R - Recommended, N - Not Recom									
File	Tier 0: Private Repo	Tier 1: One-time Release	Tier 2: Close Collaboration	Tier 3: Working in Public	Tier 4: Community Governance				
<u>LICENSE</u>	М	М	M	M	M				
SECURITY.md	N	М	M	M	M				
README.md	М	М	M	M	M				
CONTRIBUTING.md	R	R	M	M	M				
MAINTAINERS.md	N	N	R	M	M				
GOVERNANCE.md	N	N	N	R	M				
CODEOWNERS.md	N	N	R	M	M				
COMMUNITY_GUIDELINES.md	N	N	M	M	M				
CODE_OF_CONDUCT.md	N	N	M	M	M				

Ordinality of Documentation By Tier (M - Mandatory, R - Recommended, N - Not Recommended)					on By Tier - Not Recomm				
File	Sections	Tier 0: Private Repo	Tier 1: One- time Release	Tier 2: Close Collaboration	Tier 3: Working in Public	Tier 4: Community Governance	Notes		
LICENSE	License	М	М	М	М	М	All repositories, whether private or public, must include authorship and copyright information. By default, work done by federal employees is not subject to copyright protections under Title 17 U.S. Code Sections 101 & 105, unless for security or contracting purposes.		
SECURITY.md	Security and Responsible Disclosure Policy	N	М	М	М	М	This outlines the Security & Responsibility Disclosure policies including vulnerability submission, etc.		
	Project Description	М	М	М	М	М	This should be 1-3 sentence short description of the project that can be used as a 'one-liner' to describe the repo. A best practice is using this same language as the official 'description' on a GitHub repo landing page.		
	About the Project	М	М	М	М	М	This should be a longer-form description of the project. It can include history, background, details, problem statements, links to design documents or other supporting materials, or any other information/context that a user or contributor might be interested in.		
	Project Vision	R	N	М	R	R	This should be a forward-looking statement that outlines the desired future state or long-term goals of the project.		
	Project Mission	R	R	М	R	R	This should be a statement that defines the purpose, scope, and specific objectives of the project.		
	Agency Mission	R	R	М	R	N	Agency-led projects should include information about their agency mission. This should be taken directly from agency websites or wikis.		
	Team Mission	R	R	М	R	N	Agency-led projects should include information about the team executing on the mission. This should be taken directly from internal team charters and functional statements.		
	Core Team	R	М	М	М	М	This information helps with succession planning and provenance for security compliance and remediation. It helps future users and contributors understand where the code originated.		
	Documentation Index	R	R	R	М	М	This is a like a 'table of contents' for your documentation. Tier 0/1 projects with simple README.md files without many sections may or may not need this, but it is still extremely helpful to provide "bookmark" or "anchor" links to specific sections of your file to be referenced in tickets, docs, or other communication channels.		
	Repository Structure	R	R	R	М	М	Using the "tree" command can be a helpful way to generate this information, but, be sure to update it as the project evolves and changes over time.		
	Development and Software	N	R	R	М	М			
	Delivery Lifecycle Local Development	R	R	M	M	M	Tier 1: Even if the lifecycle is "one-time release" being explicit is better than implicit Use step by step instructions to get from 'zero' to 'running code.' Should include any system libraries or packages that are a 'pre-requisite' to installation of your project. When possible, including install instructions for multiple Operation Systems (or being explicit about which operating		
README.md	Coding Style and Linters	R	R	М	М	M	system the project was developed on) is a recommended practice. This section outlines best practices contributors should follow to reduce friction and improve readability, functionality, and quality of contributions to a project. Oftentimes, these checks can be automated and run as part of a continuous integration and deployment pipeline.		
	Branching Model	R	R	R	М	M	Even for Tier 0/1 projects with one or a few contributors, branching models (such as git flow) are still recommended as a best practice for keeping feature development history clear, and to help reinforce development best practices.		
Cor	Contributing	N	R	М	М	М	For projects that accept contributions, point towards the CONTRIBUTING.md file. For those that do not (tier0/1) not recommended to include this section, instead, mention one-time release, or private repo status instead.		
	Codeowners	N	R	М	М	М	Though all tiers have an 'implied' code-owner, since there is at least one author of the repo, explicit is better than implicit. In the case that a project may outlive the employment or contract of the original author, a shared inbox or alias is recommended for longer-lived projects (e.g. opensource@cms.hhs,gov)		
	Community	R	R	М	М	М	For projects that are higher tier than a one-time release, pointing your contributors towards wherever your community exists (e.g. email lists, online discussion boards or channels, project backlogs and documentation, etc)		
	Community Guidelines	R	R	М	М	М	Project tiers above one-time release should point towards a CODE_OF_CONDUCT.md file or website providing information around acceptable conduct and reporting mechanisms and escalation strategies. It is better to have these processes defined before they are needed, so you can focus on support fifwhen there is an incident, (e.g. Contributor-covenant.org)		
	Governance	N	N	R	R	M	Make a short statement about how the project is governed (formally, or informally) and link to the GOVERNANCE.md file.		
	Feedback	N	R	R	M	М	Direct users towards the channel where they're encouraged to provide feedback, typically a github.com/\$REPO/issue/new URL		
	Glossary	R	R	R	R	М	Even for early-tier projects, this documentation can be extremely valuable. Good candidate content includes any project-specific acronyms (esp applicable for Government projects) and any critical Subject Matter Expertise related vocabulary for people who are new to the domain your project is within.		
	Policies	М	М	М	М	М	This section is to explicitly link to Federal policies and guidelines that are required or recommended for Federal projects to comply with, such as Accessibility (508) Interoperability, Anti-deficiency, Security, Licensing, and other policies that can vary between agencies and domains.		
	Public Domain	М	М	М	М	М	A best practice is to list the LICENSE under which a project is released at the bottom of the README. In most cases for Federal repos, we default to Creative Commons Zero 1.0 International (world-wide public domain.)		
	How to Contribute	R	R	М	М	М	Basic instructions about where to send patches, check out source code, and get development support.		
	Getting Started	R	М	М	М	М	Often includes installation steps, pre-requisites for installation, and instuctions for working with the source code.		
	Team Specific Guidelines	N	N	R	М	М	This section helps contributors understand any team structure in the project (formal or informal.) Encouraged to point towards the MAINTAINERS.md file for further details.		
	Building dependencies	R	М	М	М	М	This step is often skipped, so don't forget to include the steps needed to install on your platform. If you project can be multi-platform, this is an excellent place for first time contributors to send patches!		
	Building the Project	R	М	М	М	М	Be sure to include build scripts and instructions, not just the source code itself!		
	Workflow and Branching	R	R	М	М	М	If your project has a preferred workflow or branching structure, mention it here. We recommend 'git flow' as a good default.		
	Testing Conventions	R	R	R	М	М	Discuss where tests can be found, how they are run, and what kind of tests/coverage strategy and goals the project has.		
CONTRIBUTING.md	Coding Style and Linters	R	R	М	М	М	HIGHLY ENCOURAGED. Specific tools will vary between different languages/frameworks (e.g. Black for python, esliint for JavaScript, etc)		
	Writing Issues	R	М	М	М	М	Make a brief statement about where to file issues, and conventions for doing so. Link to ISSUE_TEMPLATE.md file.		
	Writing Pull Requests	N	N	R	М	М	Make a brief statement about where to file pull/merge requests, and conventions for doing so. Link to PULL_REQUEST_TEMPLATE.md file.		
	Reviewing Pull Requests	N	N	R	М	М	Make a brief statement about how pull-requests are reviewed, and who is doing the reviewing. Linking to MAINTAINERS.md can help.		
	Shipping Releases	N	N	R	R	M	What cadence does your project ship new releases? (e.g. one-time, ad-hoc, periodically, upon merge of new patches) Who does so?		
	Documentation Updates	R	R	R	M	M	Where is the documentation hosted? How is it updated? Who updates it?		

	(M - M		of Documentation		ended)			
File Sections				Tier 2: Close Collaboration	Tier 3: Tier 4: Working in Commun Public Governa			
Policies		R	М	М	М	М	This section is here to explicitly link to Federal policies and guidelines that are required or recommended for Federal projects to comply with, such as Accessibility (508) Interoperability, Anti-deficiency, Security, Licensing, and other policies that can vary between agencies and domains.	
	Public Domain	R	М	М	М	М	This section is to explicitly link to Federal policies and guidelines that are required or recommended for Federal projects to comply with, such as Accessibility (508) Interoperability, Anti-deficiency, Security, Licensing, and other policies that can vary between agencies and domains.	
	Maintainers	N	N	R	M	М	Who are the project maintainers? List out @USERNAMES where possible so they can be tagged in issues/PRs directly.	
MAINTAINERS.md	Maintainers List	N	N	R	М	М	What groups/domains are maintainers a part of? Does your project have domains/areas that are maintained by specific people? List @USERNAMES directly, or any @ALIASES for groups/teams.	
	Approvers List	N	N	N	M	М	Who are the project approvers? List out @USERNAMES where possible so they can be tagged in issues/PRs directly.	
	Reviewers List	N	N	N	M	М	Who are the project reviews? List out @USERNAMES where possible so they can be tagged in issues/PRs directly.	
GOVERNANCE.md	Governance	N	N	N	R	М	Starting at Tier 3 GOVERNANCE.md has basic language about early community governance, how the project make decisions, and how contirbutors are elevated through the leadership process if any (e.g. joining teams, getting maintainer status, etc)	
OODEOWNEDO	List of Users	N	N	R	М	М	Who are the points of contact in your project who are responsible/accountable for the project? This can often be an engineering or design manager or leader, who may or may not be the primary maintainers of the project.	
CODEOWNERS.md	List of Repo Domains by Owner	N	N	R	М	М	e.g. Frontend, Backend, Documentation	
	Principles	N	N	М	М	М	This section communicates to prospective contributors and users what the values of your community are. The examples provided in the template were established by the Justice40 project at USDS.	
COMMUNITY_GUIDELINES.md	Community Guidelines	N	N	М	М	М	This section communicates specific norms and guidelines for how to participate and contribute positively to your community. The more explicit you can be about behaviors you'd like to encourage or discourage, the less friction new contributors will experience in onboarding and operating within your project.	
	Acknowledgements	N	N	М	М	М	This section recognizes previous work and best practices established by the other members of the federal open source community such as USDS, GSA, 18F, and the Justice40 Project.	
CODE OF CONDUCT.md	Contributor Code of Conduct	N	N	М	М	М	Project tiers above one-time release should include a CODE_OF_CONDUCT.md file or website providing information around acceptable conduct and reporting mechanisms and escalation strategies. It is better to have these processes defined before they are needed, so you can focus on suppport if/when there is an incident (e.g. Contibutor-covenant.org)	
	Acknowledgements	N	N	М	М	М	This section recognizes previous work and best practices established by the other members of the federal open source community such as USDS, GSA, 18F, and the Justice40 Project.	

Abbreviation	Ordinality
M	Mandatory
R	Recommended
N	Not Recommended

			(M -		of Documentation		nded)	
File	Sections	Section Ordinality	Tier 0	Tier 1	Tier 2	Tier 3	Tier 4	Notes
LICENSE.md	License	Mandatory	M	M	М	М	М	
	Project Description	Mandatory	М	М	M	M	М	This should be 1-3 sentence short description of the project that can be used as a 'one-liner' to describe the repo. A best practice is using this same language as the official 'description' on a GitHub repo landing page.
	About the Project	Mandatory	M	M	M	M	M	
	Core Team	Recommended	R	M	M	M	М	
	Documentation Index	Recommended	R	R	М	M	М	
	Repository Structure	Recommended	R	R	R	M	М	
README.md	Contributing	Mandatory	N	R	М	M	M	
KE/ KDIWE.IIIG	Codeowners	Mandatory	N	R	М	M	М	
	Maintainers	Recommended	N	N	R	R	М	
	Community	Mandatory	R	M	M	M	М	
	Community Guidelines	Mandatory	R	M	M	М	М	
	Governance	Recommended	N	R	R	R	М	
	Feedback	Recommended	N	R	R	R	М	
	Glossary	Recommended	N	R	R	R	М	
	How to Contribute	Mandatory	R	M	М	М	М	
	Getting Started	Recommended	M	М	М	М	М	
	Team Specific Guidelines	Recommended	N	N	R	M	М	
	Building dependencies	Recommended	R	M	М	М	М	
	Building the Project	Recommended	R	М	М	M	М	
	Workflow and Branching	Recommended	R	R	М	M	М	
	Testing Conventions	Recommended	R	R	R	M	М	
CONTRIBUTING.md	Coding Style and Linters	Recommended	R	R	М	М	М	
	Issues	Recommended	R	M	M	M	M	
	Pull Requests	Recommended	N	N	R	M	M	
	Code Review	Recommended	N	N	R	M	M	
	Documentation	Recommended	R	R	R	M	M	
	Policies	Mandatory	M	M	M	M	M	
	Public Domain	Mandatory	M	M	M	M	M	
	Development and Software Delivery Lifecycle	Recommended	N	R	R	M	M	Tier 1: Even if the lifecycle is "one-time release" being explicit is better than implicit
	Local Development	Recommended	R	R	M	M	М	Ties 1. Even in the mody die to one time release being explicit to better than implicit
	Branching Model	Recommended	R	R	R	M	M	
DEVELOPMENT.md	Writing Pull Requests	Recommended	N	N	R	M	M	
DEVELOT MENTAND	Reviewing Pull Requests	Recommended	N N	N	R	M	M	
	Releases	Recommended	N N	N N	R	R	M	
	Documentation	Recommended	R	R	R	M	M	
	Maintainers	Recommended	N N	N	R	M	M	
MAINTAINERS.md	Maintainers Table	Recommended	N N	N N	R	M	M	
COVEDNANCE md				N N	N N	R R	M	Ties 1 COVERNANCE and has been language about early service.
GOVERNANCE.md	Governance	Mandatory	N	N	N	K	IVI	Tier 1 GOVERNANCE.md has basic language about early community governance

Appendix A: Draft Open Source Project Maturity Model	NOTES
The 'Working Model' so far is:	
Tier 0 - Private Repository	Personal repo, a fresh git init
Purpose: Experimental/Historical	Early-stage, experimental, lifespan could be hours or days, could be longer
Expectation of Maintainership: None	The is no expectation that other contributors will be involved, however, being kind to your future self is still encouraged. A README will help you remember how to install the dependencies, what the project's purpose is, and importantly, helps with succession planning, should your employment/contract/volunteerism come to an end, and others need to pick up where you left off. As the original author, you have full autonomy (under the constraints of applicable laws and regulations) to choose an acceptable license. This by default is recommended to be Creative Commons Zero 2.0 International license.
Common Use Cases: Working projects, example code, or early prototypes	Project is at its earliest stages, inception, prototyping, experimentation, proof-of-concept.
Governance Model: None	Without any external contributors or reviewers, there is little need for formal governance, though future-you as a user would benefit from documentation around how the code is used or updated in a git workflow.
Example Repos: Personal projects, one-offs, scripts	Project is at its earliest stages, inception, prototyping, experimentation, proof-of-concept.
Characterized by Community Files: LICENSE.md, README.md	The is no expectation that other contributors will be involved, however, being kind to your future self is still encouraged. A README will help you remember how to install the dependencies, what the project's purpose is, and importantly, helps with succession planning, should your employment/contract/volunteerism come to an end, and others need to pick up where you left off. As the original author, you have full autonomy (under the constraints of applicable laws and regulations) to choose an acceptable license. This by default is recommended to be Creative Commons Zero 2.0 International license.
Tier 1 - One-time Release (Transparency-sakes)	
Purpose: Informational/Historical	
Expectation of Maintainership: None or Minimal	
Common Use Cases: Code examples for Paper Publishing, Historical Archival	
Governance Model: None to Adhoc	
Example Repos: Publicly archived repos on https://github.com/CMSgov, https://github.com/CMSgov/CMMI-Health-Equity	
Characterized by Community Files: LICENSE.md, README.md	
Tier 2 - Close Collaboration (Innersource-style)	
Purpose: Collaborate with smaller, mostly internal teams	
Expectation of Maintainership: Minimal to Active	
Common Usecases: Project repo within a team or opdiv, Internal Repo for Innersource-style work	
Governance Model: Closed	
Example Repos: Most non-public repos in https://github.cms.gov or other Internal CMS GitHub Enterprise Instances.	
Characterized by Community Files: README.md, LICENSE.md, CONTRIBUTING. md	
Tion 2. Westing in Dublic (Dublic Denosites)	
Tier 3 - Working in Public (Public Repository)	
Purpose: Collaborate in the Open with smaller, semi-open teams Expectation of Maintainership: Minimal to Active	
Common Usecases: Project repo developed Open Source by CMS or a CMS	
Contractor, Public Website hosted on Github, Tool or Utility used in CMS official business by the public, limited external contribution.	
Governance Model: Closed, CMS-led	
Example Repos: CMS OpenAPIs such as Bluebutton, BCDA, AB2D, etc	
Characterized by Community Files: README.md, LICENSE.md, CONTRIBUTING. md	
Tier 4 - Open Source Community	
Purpose: Collaborate broadly in public	
Expectation of Maintainership: Active to Proactive	

Common Usecases: Open Source Tool donated to or stewarded by an external community, open standard that welcomes public input, mature open source project that purposefully develops an official governance structure and body.	
Example Repos: Inferno	
Characterized by Community Files: README.md, LICENSE.md, CONTRIBUTING. md, MEMBERSHIP.md, MAINTAINERS.md, GOVERNANCE.md	

Runbook Deliverable				Grants Equity Repository						
Section Title	Description	Associated File	Notes	Section Title	Description	Notes				
About the Project				About the Project						
Core Team				Core Team						
Community Organization and Governance	Overview of com	munity organization		Repository Structure						
Community Guidelines	Overview of com	munity guidelines		Development						
Onboarding and Engagement				Contributing	Overview of contribution guidelines and types	contributing.md				
Contributions				Security	Protocol for security issues					
Responsible Disclosure Policy				Authors and Maintainers	Project participants and maintainers					
Feedback				Public Domain	Description of IP rights and licenses					
Code Releases										
Glossary										
References										
Policy Disclaimers										
Maintainers	list of individuals	maintainers.md								
Contributing to the Project		contributions.md								
Ways to Contribute										
Community Guidelines - Full	details of commu	community_guidelin	nes.md							

Tier	Tier Description	Runbook Sections	Section Ordinality	Associated Files	File Ordinality	Notes
		About the Project	Required	Readme.md	Required	
1 - Transparency	Purpose: Informational/Historical	Core Team	Recommended	Readme.md	Recommended	Tier 1 projects benefit from having 'originating team' information, but probably do not need a CODEOWNERS.md file, as it give an impression of maintainership.
	Expectation of Maintainership: None or Minimal Common Use Cases: Code examples for Paper Publishing, Historical Archival Governance Model: None to Adhoc Example Repos: Publicly archived repos on https://github.com/CMSgov, https: //github.com/CMSgov/CMMI-Health-Equity	Maintainers	Not Recommended	Maintainers.md	Not Recommended	Tier 1 projects don't have an expectation of maintainership, they're mostly 'one-time' releases, so we want to not give an expectation of maintainership.
	Characterized by Community Files: LICENSE.md, README.md	License	Required	<u>License.md</u>	Required	
		Code of Conduct	Not Recommended	Code of conduct.md	Not Recommended	Tier 1 proejcts do not have an expectation of ongoing development, so we don't want to give an expectation of community activity if it's a 'one-time' release.
		Contributing	Not Recommended	CONTRIBUTING.md	Not Recommended	Tier 1 proejcts do not have an expectation of ongoing development, so we don't want to give an expectation of community contributions being accepted if it's a 'one-time' release. If it's not a one-time release, then including this as a section in the README is recommended, and maybe a separate file too if applicable.
		About the Project	Required	Readme.md	Required	
	Purpose: Collaborate with smaller, mostly internal teams Expectation of Maintainership: Minimal to Active Common Usecases: Project repo within a team or opdiv, Internal Repo for Innersource-style work Governance Model: Closed Example Repos: Most non-public repos in https://github.cms.gov or other Internal CMS GitHub Enterprise Instances.	Core Team	Recommended	Readme.md	Recommended	Tier 2 projects have an expectation of collaboration, so including a CODEOWNERS.md file, in addition to a section about the originating team, is recommended or required.
2 - Close Collaboration		Maintainers	Recommended	Maintainers.md	Recommended	Tier 2 projects may have a 'flat' structure for developers/maintainers, or they may have a 'hierarchy' of how developers become maintainers. It is typically a good practice to explain how to get 'commit bit' or 'write access' to a repository, as a new member of the team, even if it is a closed team. Whether there are additional levels beyond 'write' access (e.g. Triage, Maintainer, etc) is up to the project, and should be captured in a doc if so.
	Characterized by Community Files: README.md, LICENSE.md, CONTRIBUTING.md	License	Required	<u>License.md</u>	Recommended	
	CONTRIBUTING.IIIQ	Code of Conduct	Required	Code_of_conduct.md	Recommended	Tier 2 projects do have an expectation of community development. Since Federal employees are expected to operate at a baseline of community guidelines, we should at a minimum include that information, and recommended, we adopt the same code of conduct best practices for innersource and open source projects (e.g. contributor convenant, etc)
		Contributing	Recommended	Contributing.md	Required	
						should at a minimum include that information, and recommended, we the same code of conduct best pra innersource and open source proje

3 - Public Repository	Purpose: Collaborate in the Open with smaller, semi-open teams Expectation of Maintainership: Minimal to Active Common Usecases: Project repo developed Open Source by CMS or a CMS Contractor, Public Website hosted on Github, Tool or Utility used in CMS official business by the public, limited external contribution. Governance Model: Closed, CMS-led Example Repos: CMS OpenAPIs such as Bluebutton, BCDA, AB2D, etc Characterized by Community Files: README.md, LICENSE.md, CONTRIBUTING.md			
4 - Open Source Community	Purpose: Collaborate broadly in public Expectation of Maintainership: Active to Proactive Common Usecases: Open Source Tool donated to or stewarded by an external community, open standard that welcomes public input, mature open source project that purposefully develops an official governance structure and body. Example Repos: Inferno Characterized by Community Files: README.md, LICENSE.md, CONTRIBUTING.md, MEMBERSHIP.md, MAINTAINERS.md, GOVERNANCE.md	Required	Readme.md	
		Required	Maintainers.md	
		Required	License.md	
		Required	Code_of_conduct.md	
		Required	Contributing.md	
		Required	Membership.md	
		Required	Governance.md	
		Required	Development.md	