

NAVIGATING THE MAZE



Who is Chad Green?

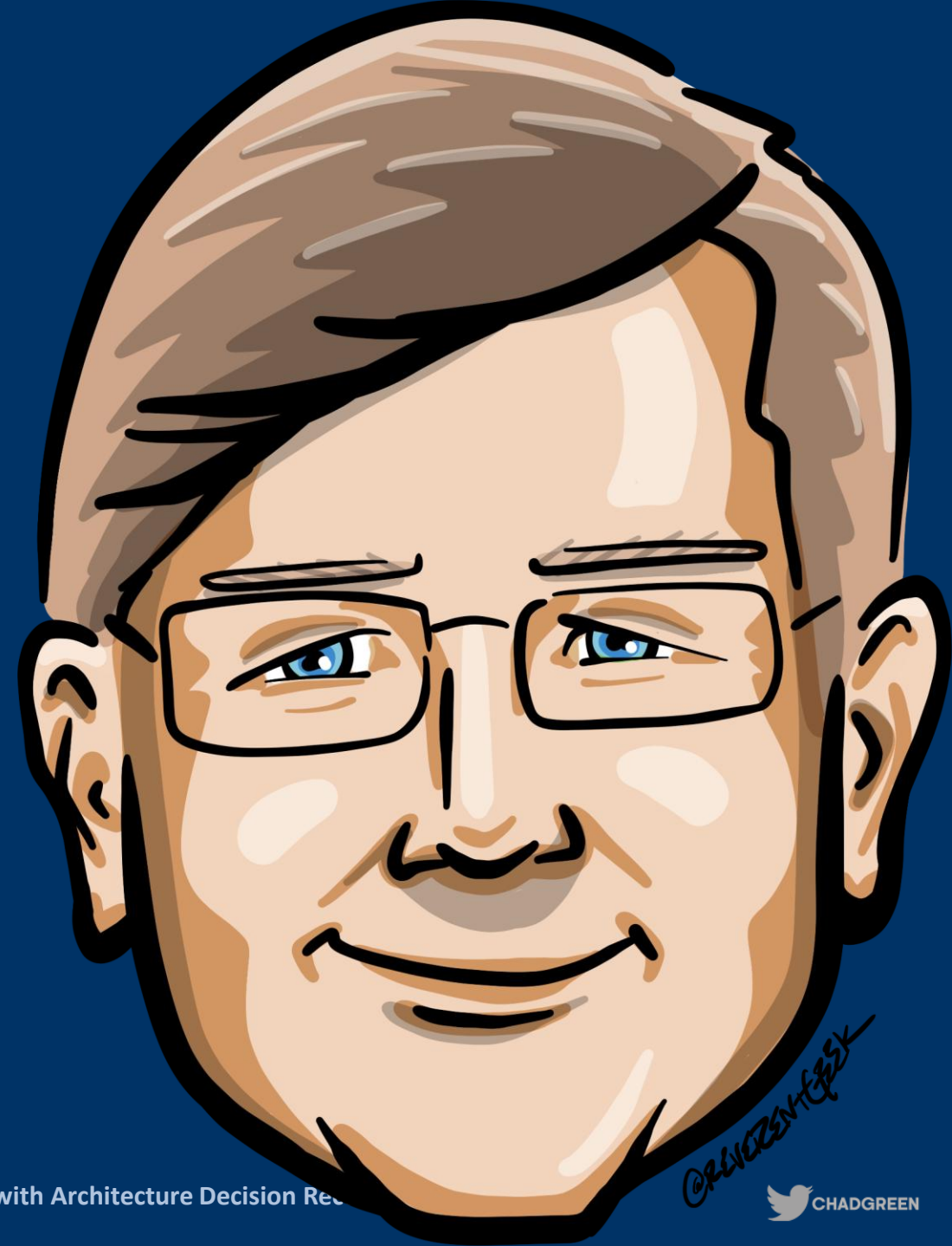
✉ chadgreen@chadgreen.com

💬 TaleLearnCode

🌐 ChadGreen.com

🐦 ChadGreen & TaleLearnCode

🌐 ChadwickEGreen

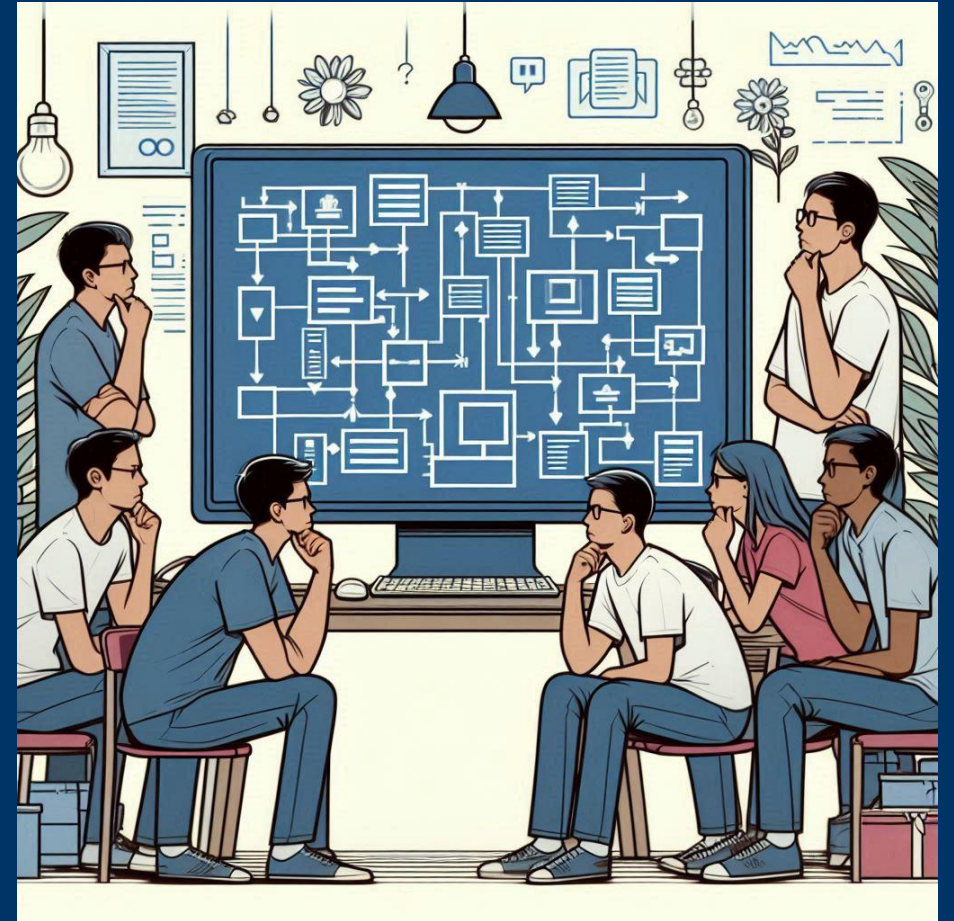


Agenda

- Introduction to ADRs
- Core Principals of ADRs
- Real-World Examples
- ADR Best Practices
- Q&A
- Conclusion

Introduction to ADRs

Navigating the Maze: Communicating Architecture Decisions with Architecture Decision Records



What are Architecture Decision Records (ADRs)?



What are Architecture Decision Records (ADRs)?



Lightweight documents that capture these important decisions

What are Architecture Decision Records (ADRs)?



decision blueprint

What are Architecture Decision Records (ADRs)?



**Provide transparency,
accountability, and
traceability**

What are ADRs Important?



What are ADRs Important?



Why did we decide to do things this way?

What are ADRs Important?



Reduce the need for back-and-forth discussions

What are ADRs Important?



Enhance alignment across teams

What are ADRs Important?



Promote transparency and accountability

What are ADRs Important?



**ADRs clarify, reduce friction,
and ensure the architecture
evolves thoughtfully**

Core Principles of ADRs

Navigating the Maze: Communicating Architecture Decisions with Architecture Decision Records



ADR Key Elements: Decision



**clear, concise statement of
the choice that was made**

ADR Key Elements: Context



**background or problem that
led to the decision**

ADR Key Elements: Consequences



**documents the expected
outcomes of the decision**

ADR Template

[Short title of solved problem and solution]

- **Status:** [proposed | rejected | accepted | deprecated | superseded by `xxxx`]
- **Date:** [YYYY-MM-DD when the decision was last updated]
- **Work Item:** [Identifier and name of the work item initiating the decision linked to the work item and in the form of `(xxxx-yyy)` where `xxxx` is the number of the work item and `yyy` is the name of the work item.]

Context and Problem

[Describe the context and problem in which the decision is being made in free form using a couple of sentences or in form of an illustrative story.]

<!-- Decision Drivers is an optional element; feel free to remove. -->

Decision Drivers

- [Decision driver 1, e.g., a force, facing concern, ...]
- [Decision driver 2, e.g., a force, facing concern, ...]
- ... <!-- numbers of drivers can vary -->

Considered Options

- [Title of Option 1]
- [Title of Option 2]
- [Title of Option 3]
- ... <!-- the number of options can vary -->

Decision Outcome

Chosen option: "[title of chosen option]," because [justification, e.g., the only option, which meets criterion decision driver | which resolves force (force) | ... | comes out best (see below)]

Consequences

- Good, because [positive consequence, e.g., improvement of one or more desired qualities, ...]
- Bad, because [negative consequence, e.g., compromising one or more desired qualities, ...]

Implementation

[Describe the steps required to implement the decision, including any dependencies, timelines, or resource allocations.]

Confirmation

[Describe how the implementation of/compliance with the ADR is confirmed.]

Stakeholders

[List the stakeholders involved in or affected by the decision. This may include individuals, teams, departments, or external parties.]

Pros and Cons of the Options

[Title of Option 1]

- Good, because [argument a]
- Good, because [argument b]
- Neutral, because [argument c]
- Bad, because [argument d]
- ... {numbers of pros and cons can vary}

[Title of Other Option]

- Good, because [argument a]
- Good, because [argument b]
- Neutral, because [argument c]
- Bad, because [argument d]
- ... <!-- the numbers of pros and cons can vary -->

More Information

[You might want to provide additional evidence/confidence for the decision outcome here and/or document the team agreement or the decision and/or define when/how this decision should be realized and if/when it should be re-visited. Links to other decisions and resources might appear here as well. If there is no more information, please use "No more information available".]

Follow-On Information

[Provide details about what happens to the ADR after approval or rejection (and the record is immutable). This section can include information about any updates, revisions, or further actions taken based on the decision outcome.]

Record History

- **Proposed:** [Date]
- **Rejected:** [Date, if applicable]
- **Accepted:** [Date, if applicable]
- **Last Reviewed:** [Date, if applicable]
- **Deprecated:** [Date, if applicable]
- **Superseded by:** [Reference to the ADR that supersedes this one, if applicable]
- **Date Superseded:** [Date, if applicable]
- **Archived:** [Date, if applicable]

Template: Title and Metadata

[Short title of solved problem and solution]

- **Status:** [proposed | rejected | accepted | deprecated | superseded by xxxx]
- **Date:** [YYYY-MM-DD when the decision was last updated]
- **Work Item:** [Identifier and name of the work item initiating the decision linked to the work item and in the form of {xxxx-yyy} where xxxx is the number of the work item and yyy is the name of the work item.]

Template: Context and Problem

Context and Problem

[Describe the context and problem in which the decision is being made in free form using a couple of sentences or in form of an illustrative story.]

<!-- Decision Drivers is an optional element; feel free to remove. -->

Template: Decision Drivers

Decision Drivers

- [Decision driver 1, e.g., a force, facing concern, ...]
- [Decision driver 2, e.g., a force, facing concern, ...]
- ...<!-- numbers of drivers can vary -->

Template: Considered Options

Considered Options

- [Title of Option 1]
- [Title of Option 2]
- [Title of Option 3]
- ... <!-- the number of options can vary -->

Template: Decision Outcome

Decision Outcome

Chosen option: "[title of chosen option]," because [justification, e.g., the only option, which meets criterion decision driver | which resolves force {force} | ... | comes out best (see below)]

Consequences

- Good, because [positive consequence, e.g., improvement of one or more desired qualities, ...]
- Bad, because [negative consequence, e.g., compromising one or more desired qualities, ...]

Implementation

[Describe the steps required to implement the decision, including any dependencies, timelines, or resource allocations.]

Confirmation

[Describe how the implementation of/compliance with the ADR is confirmed.]

Stakeholders

[List the stakeholders involved in or affected by the decision. This may include individuals, teams, departments, or external parties.]

Template: Pros and Cons

Pros and Cons of the Options

[Title of Option 1]

- Good, because [argument a]
- Good, because [argument b]
- Neutral, because [argument c]
- Bad, because [argument d]
- ... {numbers of pros and cons can vary}

[Title of Other Option]

- Good, because [argument a]
- Good, because [argument b]
- Neutral, because [argument c]
- Bad, because [argument d]
- ... <!-- the numbers of pros and cons can vary -->

Template: More Information

More Information

[You might want to provide additional evidence/confidence for the decision outcome here and/or document the team agreement or the decision and/or define when/how this decision should be realized and if/when it should be re-visited. Links to other decisions and resources might appear here as well. If there is no more information, please use "No more information available".]

Template: Follow-On Information

Follow-On Information

[Provide details about what happens to the ADR after approval or rejection (and the record is immutable). This section can include information about any updates, revisions, or further actions taken based on the decision outcome.]

Template: Record History

Record History

- **Proposed:** [Date]
- **Rejected:** [Date, if applicable]
- **Accepted:** [Date, if applicable]
- **Last Reviewed:** [Date, if applicable]
- **Deprecated:** [Date, if applicable]
- **Superseded by:** [Reference to the ADR that supersedes this one, if applicable]
- **Date Superseded:** [Date, if applicable]
- **Archived:** [Date, if applicable]

Template

[Short title of solved problem and solution]

- **Status:** [proposed | rejected | accepted | deprecated | superseded by `xxxx`]
- **Date:** [YYYY-MM-DD when the decision was last updated]
- **Work Item:** [Identifier and name of the work item initiating the decision linked to the work item and in the form of `(xxxx-yyy)` where `xxxx` is the number of the work item and `yyy` is the name of the work item.]

Context and Problem

[Describe the context and problem in which the decision is being made in free form using a couple of sentences or in form of an illustrative story.]

<!-- Decision Drivers is an optional element; feel free to remove. -->

Decision Drivers

- [Decision driver 1, e.g., a force, facing concern, ...]
- [Decision driver 2, e.g., a force, facing concern, ...]
- ... <!-- numbers of drivers can vary -->

Considered Options

- [Title of Option 1]
- [Title of Option 2]
- [Title of Option 3]
- ... <!-- the number of options can vary -->

Decision Outcome

Chosen option: "[title of chosen option]," because [justification, e.g., the only option, which meets criterion decision driver | which resolves force {force} | ... | comes out best (see below)]

Consequences

- Good, because [positive consequence, e.g., improvement of one or more desired qualities, ...]
- Bad, because [negative consequence, e.g., compromising one or more desired qualities, ...]

Implementation

[Describe the steps required to implement the decision, including any dependencies, timelines, or resource allocations.]

Confirmation

[Describe how the implementation of/compliance with the ADR is confirmed.]

Stakeholders

[List the stakeholders involved in or affected by the decision. This may include individuals, teams, departments, or external parties.]

Pros and Cons of the Options

[Title of Option 1]

- Good, because [argument a]
- Good, because [argument b]
- Neutral, because [argument c]
- Bad, because [argument d]
- ... {numbers of pros and cons can vary}

[Title of Other Option]

- Good, because [argument a]
- Good, because [argument b]
- Neutral, because [argument c]
- Bad, because [argument d]
- ... <!-- the numbers of pros and cons can vary -->

More Information

[You might want to provide additional evidence/confidence for the decision outcome here and/or document the team agreement or the decision and/or define when/how this decision should be realized and if/when it should be re-visited. Links to other decisions and resources might appear here as well. If there is no more information, please use "No more information available".]

Follow-On Information

[Provide details about what happens to the ADR after approval or rejection (and the record is immutable). This section can include information about any updates, revisions, or further actions taken based on the decision outcome.]

Record History

- **Proposed:** [Date]
- **Rejected:** [Date, if applicable]
- **Accepted:** [Date, if applicable]
- **Last Reviewed:** [Date, if applicable]
- **Deprecated:** [Date, if applicable]
- **Superseded by:** [Reference to the ADR that supersedes this one, if applicable]
- **Date Superseded:** [Date, if applicable]
- **Archived:** [Date, if applicable]

Writing Clear ADRs



Writing Clear ADRs



- Be concise but comprehensive

Writing Clear ADRs



- Be concise but comprehensive
- Focus on the ‘why’, not just the ‘what’

Writing Clear ADRs



- Be concise but comprehensive
- Focus on the ‘why’, not just the ‘what’
- Address alternatives and rejected options

Writing Clear ADRs



- Be concise but comprehensive
- Focus on the ‘why’, not just the ‘what’
- Address alternatives and rejected options
- Keep the language simple and direct

Writing Clear ADRs

Vague ADR

We choose MongoDB.

Clear ADR

We choose MongoDB due to its flexible schema and ability to handle high write throughput, address our scalability needs.

Real-World Examples

Navigating the Maze: Communicating Architecture Decisions with Architecture Decision Records



The Decision



**Adopt a serverless
architecture using Azure
Functions**

Rationale



**reduced need for
infrastructure management**

**Azure Functions provided
automatic scaling**

Context



needed to move fast to stay competitive in a fast-evolving market

Consequences

Positives

- Faster time-to-market
- Reduced operational costs
- Improved scalability

Consequences

Positives

- Faster time-to-market
- Reduced operational costs
- Improved scalability

Trade-Offs

- Initial learning curve
- Vendor lock-in

Best Practices for ADRs

Navigating the Maze: Communicating Architecture Decisions with Architecture Decision Records



Best Practices for Creating ADRs



write ADRs early

Best Practices for Creating ADRs



**keep ADRs short and
focused on a single decision**

Best Practices for Creating ADRs



**regularly review and update
ADRs**

Best Practices for Creating ADRs



use a consistent format

Best Practices for Creating ADRs



involve the entire team

Best Practices for Creating ADRs



- Write ADRs early
- Keep ADRs short and focused on a single decision
- Regularly review and update ADRs
- Use a consistent format
- Involve the entire team

Maintaining ADRs Over Time



Maintaining ADRs Over Time



**establish a regular review
process**

Maintaining ADRs Over Time



**update ADRs when decisions
change**

Maintaining ADRs Over Time



use statuses

Maintaining ADRs Over Time



archive outdated ADRs

Maintaining ADRs Over Time



version control your ADRs

Maintaining ADRs Over Time



- Establish a regular review process
- Update ADRs when decisions change
- Use statuses
- Archive outdated ADRs
- Version control your ADRs

Conclusion

Navigating the Maze: Communicating
Architecture Decisions with Architecture
Decision Records

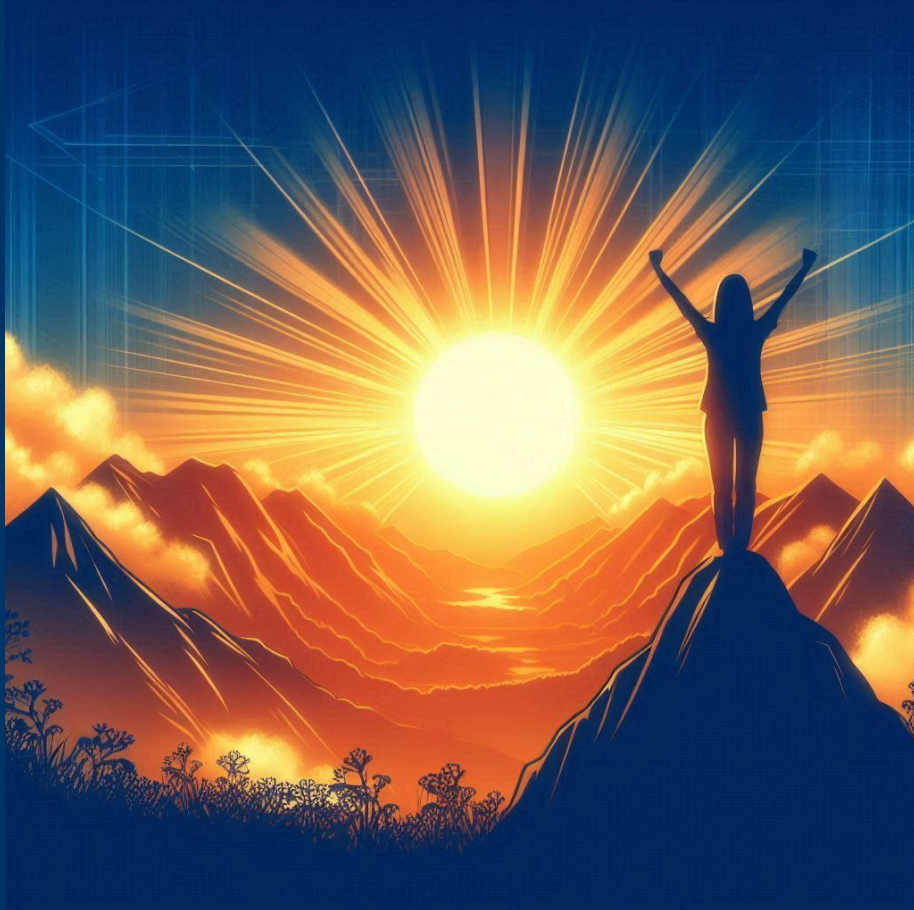


Conclusion



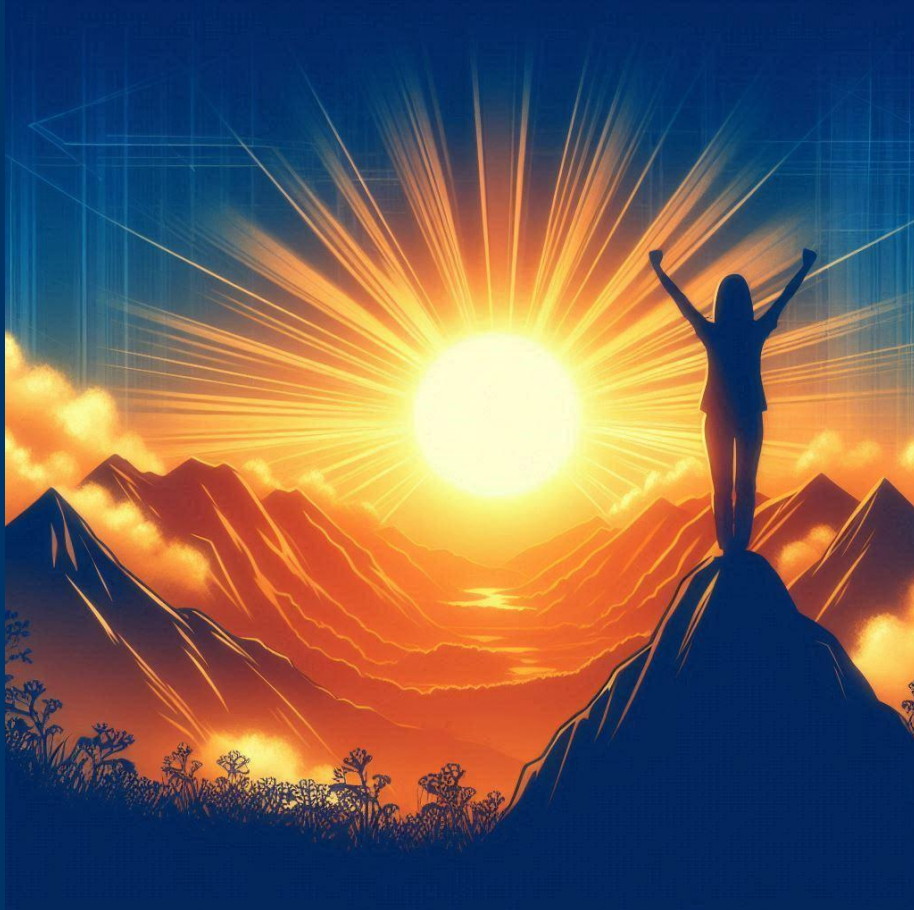
- Importance of clear communication

Conclusion



- Importance of clear communication
- ADRs are an effective tool for documenting and sharing decisions

Conclusion



- Importance of clear communication
- ADRs are an effective tool for documenting and sharing decisions
- Best practices

Questions



Contact Information

✉ chadgreen@chadgreen.com

💬 TaleLearnCode

🌐 ChadGreen.com

🐦 ChadGreen & TaleLearnCode

🌐 ChadwickEGreen

