

# Development of an OCaml API to interact with a Tezos node

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Master Project

# Agenda



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API –  
specification &  
signatures



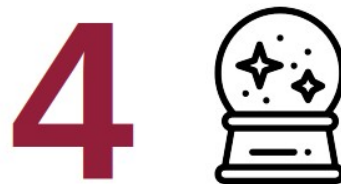
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Case study:  
auction



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Demo



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Outlook

# API specification & signatures



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API –  
specification &  
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Case study:  
auction



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Demo



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Outlook

# API specification & signatures



```
val get_puk_from_alias : string -> puk SyncAPIV0_error.Answer.t
```

`get_puk_from_alias` expects an alias of an implicit account and returns the associated public key of the account.

parameter `s`

alias of implicit account

returns

`puk` the associated public key

```
val get_puk_from_hash : string -> puk SyncAPIV0_error.Answer.t
```

`get_puk_from_hash` expects a public key hash as string and returns the associated public key of the account.

parameter `s`

public key hash

returns

`puk` the associated public key

```
val get_pukh_from_alias : string -> pukh SyncAPIV0_error.Answer.t
```

`get_pukh_from_alias` expects an alias of an implicit account and returns the associated public key hash.

parameter `s`

alias of implicit account

returns

`pukh` the associated public key hash

## HTML Docs

# Case study: auction



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Demo



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Outlook

# Case study: auction

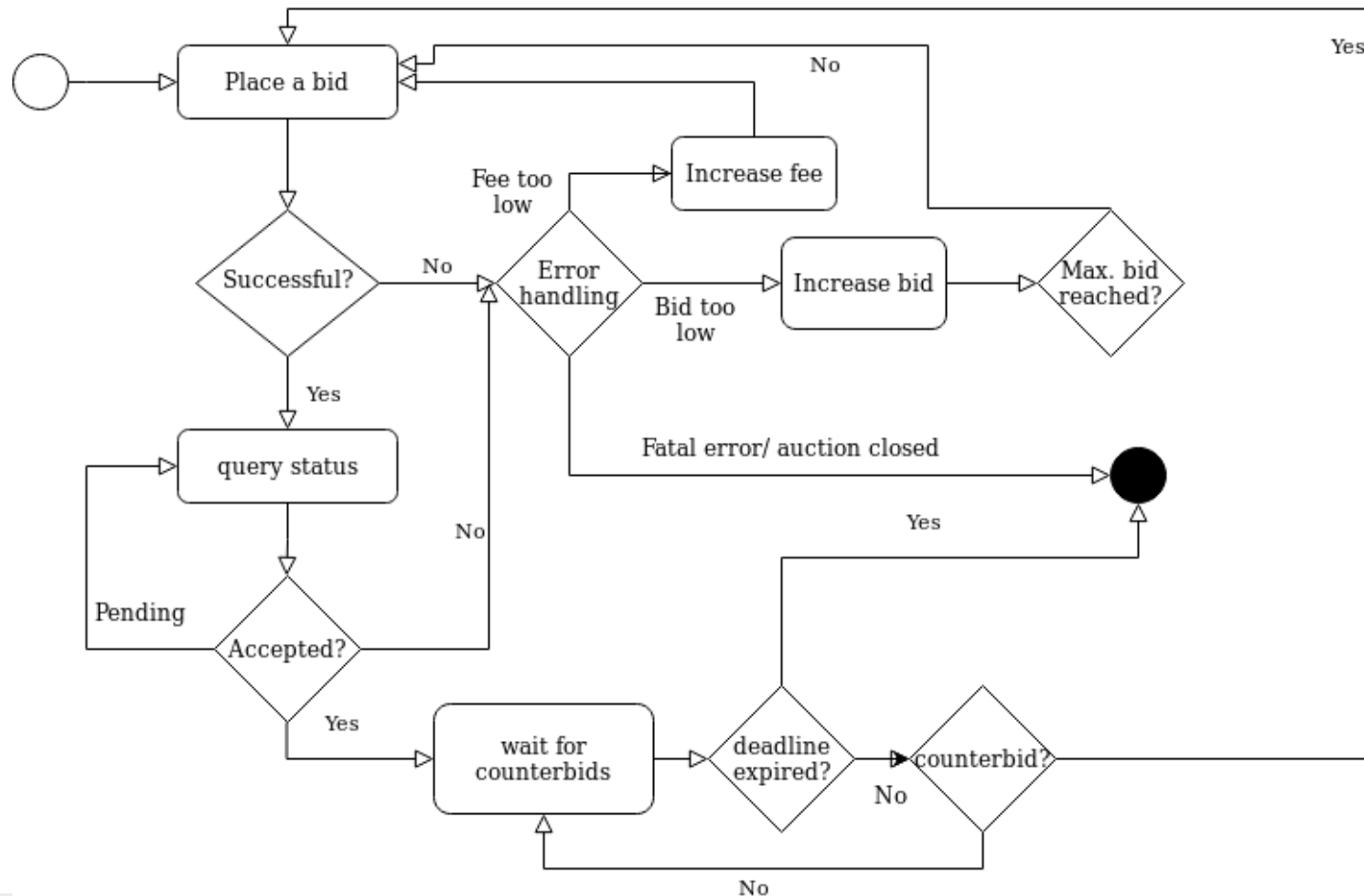


- Uses the auction contract provided
- No auction code amendments yet
- Bidder program:
  - Places bids with increasing stake/fee until succesful (→ call a contract)
  - Stays within stake & fee/burn cap (→ error handling)
  - Waits for operation inclusion (→ query)
  - Waits for counterbids (→ balance checking)
  - Terminates due to permanent errors or auction closing (→ error handling)

# Case study: auction



- Program flow:



# Case study: auction



## The bidder program



# Demo



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API –  
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Case study:  
auction



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Demo



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Outlook

## README

# Outlook



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API –  
specification &  
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Case study:  
auction



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Demo



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Outlook

- Versioning/ virtual libraries to handle different protocols
- Observables (time, block level)
- Add more info to the error types
- Make error type extensible? → Add contract specific errors if needed
- Automatic testing (using Tezt?)
- Use the estimated fee from the prevalidator (as option)
- Library packaging/ release management