

# Babel Bet

An Exploration  
of  
Duolingo  
and  
Web3



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<https://github.com/TheJollyLaMa/BabelBet>

## Babel Bet

Babel Bet is a Decentralized Application (Dapp) leveraging Web3 and a smart contract in solidity to allow students of the Duolingo app to challenge each other to friendly wagers that make language training exciting by raising the stakes and involving friends in your journey!

### Frontend

Shameless AngelToken Plug  
Decorated About Page with links to the vitals  
Shows Connected Account

InitiateChallenge  
Frontend form to start a challenge with a fellow Duolingo student  
Collects:  
Email & Password, Email to Challenge, Eth Account,  
Duolingo Username & Password, Challenge Proposal  
Sends to backend route to fill email parameters and send offer via email

CounterOffer  
Frontend form to offer different terms if the initial terms do not satisfy  
Sends to backend to fill email parameters and send counteroffer via email

Accept  
Frontend form to accept terms and stake funds  
Sends to backend to initiate escrow and send confirmation emails

ChallengeView  
Frontend view of the challenge's vital statistics and status  
Terms, Stakes, Escrow Earnings, and Challenge History

ChallengeBank  
Historical view of challenges  
Searchable by Id

### Backend

InitiateChallenge  
Sends email to your chosen language buddy with terms to a challenge

CounterOffer  
Sends email back to the initiator to suggest different terms

#### AcceptChallenge

- Grab Eth from both parties and place in Escrow with Web3
- Send email to both parties to confirm agreement with escrow details

#### WatchChallenge

- Check Students progress everyday
- Fetch both students duo info
- If (studentA.Streak && studentB.Streak && streakGoalNotYetMet )
  - Wager is still active
- Else: ExecutePayout()

#### ExecutePayout

- Payout goes to winner's Eth account via web3 call to release escrow
- Emails are sent confirming challenge completion and reporting results
- Challenge is forever stored on chain
- Payouts can be dynamic or all or nothing (80% completion = 20% loss in stake)

#### SearchById

- Look up past challenges by ID to fetch the historical record from the chain

### Solidity

#### Escrow

- Deposit to Escrow – two or more accounts deposit funds in contract account
- Each deposit entry has an ID, depositing addresses, and depositing terms
- Funds can be held frozen or released to earn yield

#### Earn

- Escrow account sweeps funds over to whatever dapp has the best scheme
- Different schemes could be selected according to risk appetite.

Notes:

Plenty of other challenges to dream up –maybe even a custom challenge option

Portions of winnings go to charity

Losers feed Losers – if you lose, all your money goes to your chosen charity.

Tip the scales – payout toppers given by the babelbet contract to incentivize certain activities

Oooooorrrr ...

Possible replay on Angel Tokens – each Challenge being an 1155. The simplest form being between two players but could include groups and handle group payouts. Switch out the angeltoken product for a set of terms to the challenge, the coefficient controls the payout amounts, and cost is the amount the players wish to stake.

So there is a challenge (contract1 (alms)), a ChallengeToken (contract2 AngelToken(genesis and buy)) and an execution contract (contract3(AT\_X)). Execution contract is the on chain watcher.