**Project Description Summary Document**

Project is a dummy model for the United States Immigration Department (USCIS), specially for their Employment Authorization Adjudication Process for H4 dependent visa holders.

Currently the department is taking 7-9 Months’ time to process it which sometimes causes job loss, financial losses to immigrants.

There are several categorization for H4 EAD Processing and I picked the category when all other documents (H1B Approval Receipt, H4 Approval Receipt, I140 Approval Receipt) are already approved and only USCIS officer needs to approve the stand alone H4 EAD.

I am sure in real case scenario there must a scanning application which might be generating the scanned copy of all documents of applicants and must be putting them on some specific shared location but in my use case I assumed that after scanning, the documents are zipped and sent over a common email [Purnima.work.953@gmail.com](mailto:Purnima.work.953@gmail.com) with title as “ **Immigartion\_H4\_I765”** and from there my bot will take over.

I have divided the process in two categories EAP\_Dispatcher process and EAP\_Processor process. Detaild description about the functions of both flows are below:

**Employment Adjudication Process (EAP)\_Dispatcher: -** In this process bot is reading all unread emails from common email id with title as “Immigartion\_H4\_I765” and making a collection of them.

* One by one bot will fetch the zipped attachment from those emails and download those zipped attachment in the download folder.
* Bot will extract the zipped folder in “H4EADDocs” folder.
* Bot will look for I765 form in all extracted folders, read the dummy form completely and will create the queue item for “EAP” queue.
* Bot will repeat the same above steps for all extracted attachment folders.

**Employment Adjudication Process (EAP)\_Processor: -** In thisprocess bot willfetch the items from the Orchestrator queue” EAP” and extract the transaction details.

* Bot will fetch the documents from “H4EADDoc” folder. Bot will extract and match few details with the details fetched from the queue item.
* Bot will check the Primary Visa holders document (H1B Approval Notice and I140 Approval Notice) and match the data with details fetched from the queue item. If both are approved and days left on H1B visa is more than 180 days (the day bot is processing the case) then bot will move ahead to check dependent’s document. There are exception scenarios when certain criteria are not met then “RFE Email (Request for more Evidence)” will sent to the applicant. (Explained in detail in DSD)
* Bot will check Dependent’s H4 Approval document and record on I94 website. If details are matched with the details fetched from the queue item, then EAD approval will be granted otherwise denial or RFE emails will be sent.
* There are again certain exception scenarios where bot can send RFE emails or can log exception message. (Details explained in DSD document)
* Bot will repeat the same steps for all items available in the queue and when no item will be left bot will stop.

**When/if it will be scheduled:** It is not scheduled but in future it can be based on business need.

**How often it will run:** It can run as per the need of business.

**If it will be used by a user:** Yes, it can be used by users.

**Arguments, Variables and its Datatypes:**

**String-** UserId, in\_FolderPath, FolderPath, BirthDate, CompleteMonth, Year, ApplicantEmail, I94Website, in\_H1BApprovalNotice,H1bApprovalNotice,I140ApprovalNotice, H4ApprovalNotice,in\_SSN, SocialSecurity, in\_I94RecordNum, out\_TotalH4Days, TotalH4days,in\_H4ApprovalNotice,in\_PassportNo, in\_IssuedCountry, inout\_EADFormPath, in\_EADForm, strH4Pdf, strI140Pdf,AttachedFolder,AttachmentName,I94RecordData,in\_FirstName,in\_LastName,in\_H1BreceiptNumber,out\_TotalH1Bdays,TotalH1Bdays,strPDFOutPut, EndDate, strH1BPdf

**Secure String:** Password, in\_Password

**ArrayString:** ArrDOB

**QueueItem:** TransactionItem

**Int32:** in\_Birthdate, in\_Date, SocialSecurity

**Boolean:** out\_I140status, I140Status, out\_RecordExist, I94RecordExist, PopupExist, isWebsiteAvailable,PathExist

**IEnumerable<Match>:** ExpireResult, PassportNo, ApplicantName,AlienRegNo, CountryIssued, BirthDate, TravelRecordNo, EligibilityCategory, SocialSecurity, H1bReceiptNumber, ApplicantEmail, H1BNoticeResult, VisaValidity,I140NoticeType, H4Validity, H4ApprovalResult

**Browser:** I94Browser

**List<MailMessage>:** EmailCollection

**Double**- out\_TotalH1BDays, out\_TotalH4days

**DateTime:** FutureH4EndDate, EndDate, H1BFuturDate, TodayDate,

**ApplicationInteraction:** Email, Browser, PDF

**Orchestrator Assets:**

|  |  |
| --- | --- |
| **Assets** | H4EADFolderPath, DownLoadZipPath, I765Form |
| **Credentials** | UserCredentials |

**Orchestrator Queue:**

|  |  |
| --- | --- |
| **Orchestrator Queue** | **Value** |
| EAP | AlienRegNo(1).value+SocialSecurity(1).value.substring(0,4)(TransactionItem) |

**Name of the WorkflwoFiles:**

EmploymentAdjudicationProcess\_Dispatcher

1. MainFlow
2. ReadEmailsWorkflow
3. CraeteQueueItem

EmploymentAdjudicationProcess\_Processor

1. MainWorkflow
2. Processing of QueueItems workflow
3. I94 ValidityCheck
4. H1BVisaVerificationProcess
5. I140VerificationProcess
6. H4ApprovalVerification

**DataManupulationFunction:**

* .SplitFunction
* DateTime.Now
* Convert.TodateTime
* Int32.Parse(in\_Date)
* .IndexOf
* .Substring
* Int32.TryParse
* .ToUpper
* .contains
* (H1BFutureDate-TodayDate).TotalDays

**Any Application that are Specific to you or Your Work Environment**

* Google Chrome should be installed on the system and UiPath Extension should be enabled in the browser
* In Gmail Security Pop up should be enabled
* Adobe Application Required

**Any Email address that must change:**

User can edit the email credentials in the UiPath Orchestrator

**Any Queue or Asset that must create in Orchestrator:**

All the Assets, Credential sand Queue are already created as per the requirement of this project and details are mentioned in this document’s “Orchestrator Assets” and “Orchestrator Queue” section.

**Any Possible Addition or Modifications:**

* I am not aware about the exact processing of H4 EAD cases so I tried to create a prototype based on my best knowledge and experience with the department so there will always be scope of improvement.
* This process can be scheduled and run-on multiple robots.

**Handling Unknown Errors:**

Log error at Error level in system.exception category and in detail it will be like exception.source and excepition.message.